# DOMESTIC ENGINEERING

*A Weekly Record of Progress in Plumbing, Heating, Ventilation and all Matters Pertaining to Domestic Sanitation*

Volume 69 Chicago OCTOBER 3, 1914 New York Number 1



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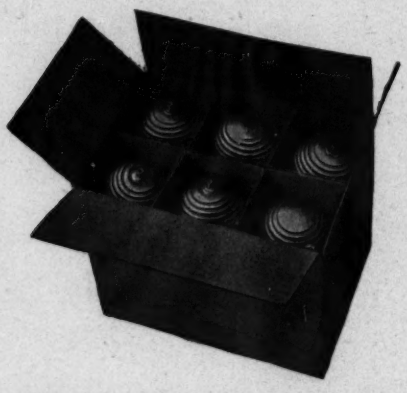

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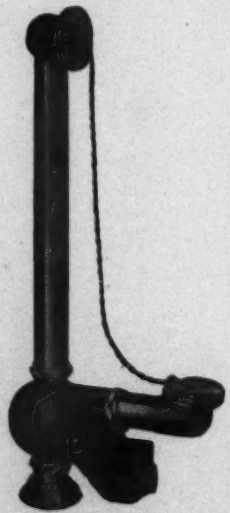

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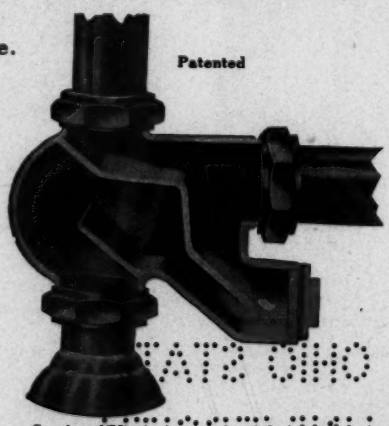

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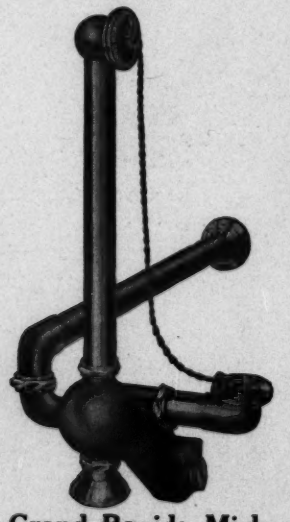

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# "Domestic Engineering" Quarterly Index

## Vol. LXIX—October 3 to December 26, 1914

**This is the twentieth index of "Domestic Engineering," an index for each quarter appearing at the end of that quarter. We ask our readers to note the value of this index for reference, calling special attention to the separate classification of the departments of "Literature, Catalogs" and "Questions and Answers," and to the "Inventions and Improvements," which give you a line on up-to-date practice and materials.**


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## FULL STEAM AHEAD!

"I BELIEVE that when times are called bad, and there seems less than the normal amount of business to be had, it pays our company to advertise more and put on more salesmen, so that, by constant and earnest effort, we can get more than our usual share of the business that is offered."

Thus spoke John N. Willys, president of the Willys-Overland Company, and one of the largest automobile manufacturers in the world, in an address before the Federation of Trade Press Associations at Chicago last week.

Mr. Willys, in a clear-cut and convincing talk, fired a telling broadside into the camp of the business depressionists and other calamity howlers. The gist of his address was a command to the business men of the United States to advance and not retreat, to be aggressive and not retrogressive.

And that he was not indulging in any impractical theories or juggling with mere words, was shown when he proceeded to prove that optimism in business is always far better than pessimism, because the former is constructive while the latter is destructive. In spite of the constant "hard times" talk emanating from high places throughout the land, the concern which Willys heads has continued a progressive policy of "full steam ahead."

"That this policy paid," said Mr. Willys, "is indicated by the fact that we did the biggest business during last August of any August in the history of the company."

The manufacturer or the master plumber and fitter who sits back in his office chair and heaves a heavy sigh that times are bad and that there is no use trying to better conditions, are in quite the same position as a party of men on board a snow-bound train in North Dakota a few years ago. Gazing out they beheld the banks of snow outside, and immediately nearly everybody grew pessimistic and wondered how long they would remain snow-bound. This "psychological depression" was suddenly dissipated when someone shouted **"Full steam ahead, boys! Everybody off and shovel snow!"**

**Similarly there are to be found business men on board the American Prosperity Train who throw up their hands in dismay when a "little snow" obstructs the right-of-way. Instead of getting off and "shoveling snow," they persist in staying on board and merely discussing the situation with ever increasing pessimism, failing to realize that it takes action and not words to keep the wheels on the move.**

Mr. Willys attributes the progress of his company to its policy of "full steam ahead," in spite of any and all obstacles. **The more difficult the situation appeared, the more steam the company put on. And the fuel for generating this steam has been found in more salesmen and more advertising. Of the latter kind of fuel, Mr. Willys had this to say:**

"Advertising in the trade journals and the several other media we employ, is largely responsible for so satisfactory a condition. Do you blame me for being so enthusiastic and optimistic about the future, when we have facts like that to bank on?"

The manufacturers or contractors, who allow the pessimists to influence their progress as business men, are in the final analysis giving their more optimistic competitors a chance to put on extra steam and to out-distance them in the race for more and bigger business.

# Mechanical Equipment of a City Hospital

## The New Louisville City Hospital Has Put Into Practice the Most Modern Devices in Plumbing, Heating and Ventilation

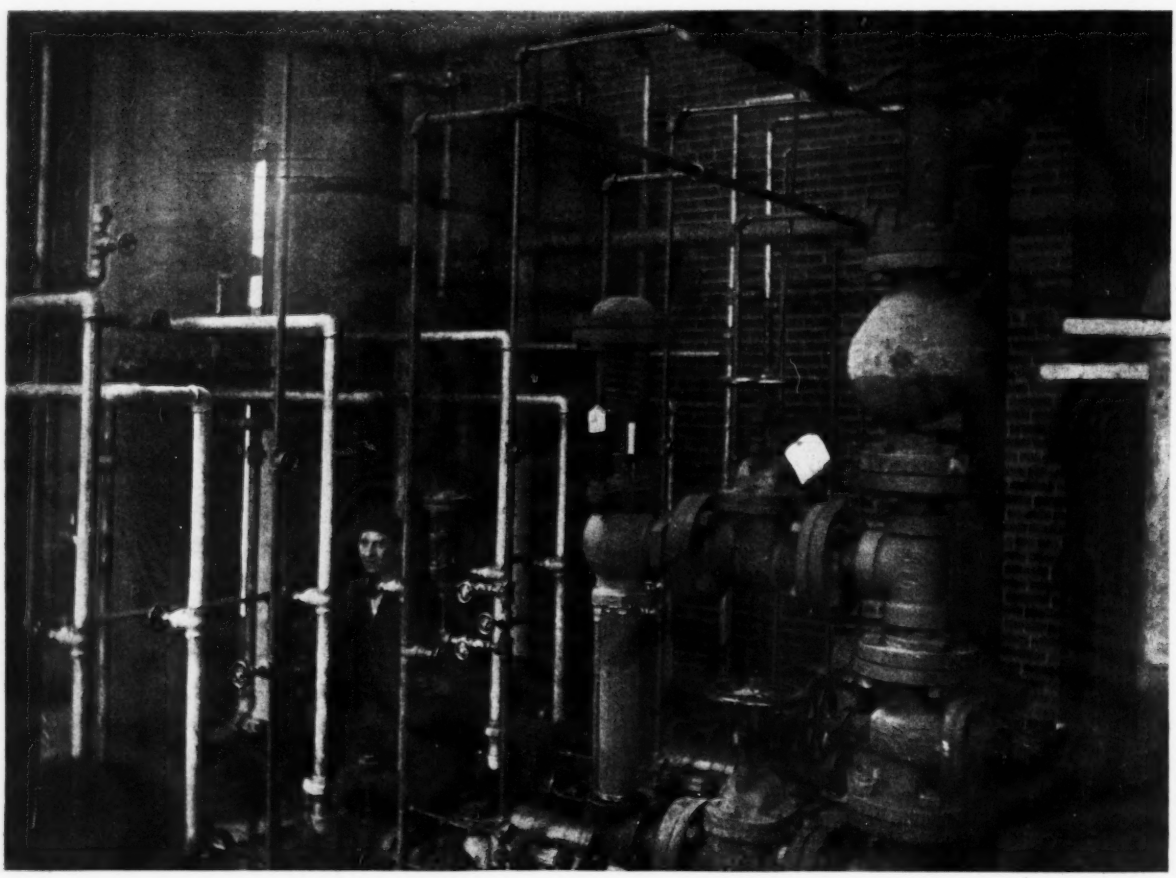
By G. D. CRAIN, JR.

THE new city hospital of Louisville, Ky., which has been in course of construction for more than a year, presents a heating and plumbing job of some magnitude—of such magnitude, in fact, that only a general survey of it can be given within the scope of a few pages. The proportions of the work may be gathered in a general way from the statement that of the $1,000,000 raised by a bond issue for the construction and equipment of the institution, practically all will be spent; that the building, or group of buildings, occupy a city block quite snugly. This group of buildings comprises twelve separate structures.

These twelve buildings include the central administration building, connected with which is the main corridor, 600 feet long, from which project the four ward buildings, and in addition to these is the psychopathic building, the clinic building, containing the auditorium, the separate isolation building, for the housing and treatment of patients with contagious diseases, the nurses' home, the employes' building, the laundry, the garage and the power and machinery building. All of these save the isolation building and the power plant, which are one story in height, and the garage and helps building, and the laundry, which are three stories each, are three full stories and a basement; and the roofs of the main hospital buildings are provided with parapets and tiled, in order that they may be used in sunning and airing patients.

The architects who designed the building as well as the heating and ventilating systems were D. X. Murphy & Bro., of Louisville. The contractors for the complete mechanical equipment, including the power plant, the heating and ventilating, the plumbing equipment, and the electric installation, are Fitzpatrick & Hoepfner, of Columbus, O., this part of the work amounting to $230,000. George Stephens has been their superintendent in charge of the work from the start.

The high-pressure steam plant consists of three 275-h.p. water tube boilers, and these furnish steam for three high-speed engines, which operate three 125 k.w. gen-

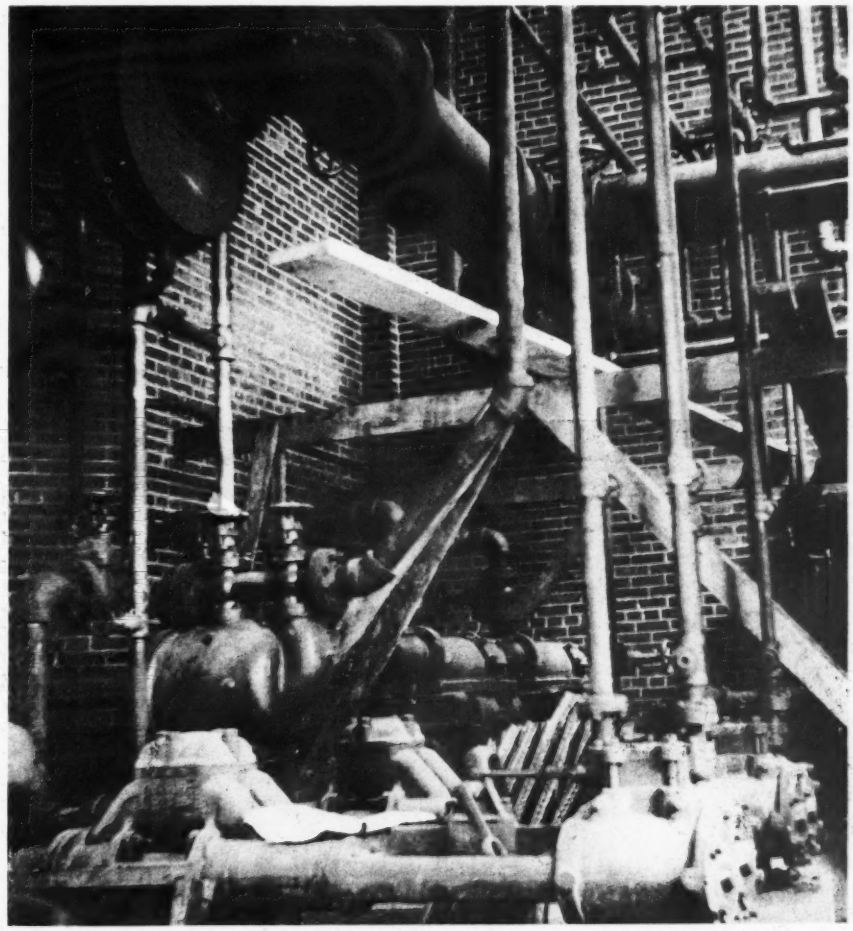


The Fire Tanks, on Left, with Connections, Supplying Five Kinds of Water, Hard, Soft, Sterilized, Ice-Cold, and Boiling, at All Hours of the Day and Night, in the Louisville City Hospital.

erator sets. This equipment is to furnish all of the light and power and all of the steam required for every purpose in the entire hospital plant.

The exhaust steam is all to be utilized in the heating system and in the operation of the 10-ton ice machine which will furnish refrigeration for the score of cold storage boxes used in the hospital, varying in size from the large units used in connection with the main kitchen for the refrigeration of meats and milk, and the morgue box, with a capacity of fifteen bodies, to the relatively small refrigerators which are to be used in connection with the various small diet kitchens scattered through the hospital. The refrigeration is to be accomplished by the circulation of brine through coils in the boxes, returning to the machine and then re-circulating.

There are also located in the power-house the tanks in which will be distilled water for use in the hospital, connected with which are pumps for use in forcing it into circulation. Altogether there are twenty-two pumps in the power-house, which are used in connection with the boiler feed, the vacuum heater system, the brine circulating system, etc.



The Steam Pump and the Feed Pipe, Overhead, of the Vacuum System in the Louisville City Hospital.

The hospital has its own well, 8 in. in diameter and 110 feet deep, with a capacity of 125 gallons a minute under a 75-pound head; and it is also connected with city water by two 4-inch lines, one for fire purposes and the other for ordinary use. Some of the lavatories are provided with five different waters—hot and cold sterilized, and distilled, and hot and cold city water.

Iced water, which is cooled, as stated, by the refrigerating plant in the power house, is supplied to the buildings for general use by thirty drinking fountains. The Durham system was adopted for the plumbing, and the fixtures used, numbering about 600 in all, are of the most modern type, including lavatories, bath tubs, showers, continuous baths, sitz baths, etc. Wall outlet fixtures have been used wherever possible.

### The Heating System.

Two systems of heating are in use, both vacuum and hot blast equipment being utilized. Direct radiation is used in all of the wards. The hot blast heating is used exclusively in the operating rooms and in the auditorium in the clinic building, which is, of course, also an operating room. Here the hot air passes through filtering cloths, the ventilation being so adjusted as to produce twenty changes of air an hour. The air is drawn directly out at the top of the room into two ventilator ducts and passed on out at the top of the building.

The rest of the building, as stated, is heated by direct radiation, 1200 radiators being used. The dressing-rooms, however, are provided with both direct and hot blast equipment—the radiators for heating and the hot blast vents for ventilation. The same is true of the toilets and of the isolation rooms.

The wards are all heated exclusively by direct radiation, and have natural ventilation through specially devised transoms over the windows. The radiators in the wards are all placed directly beneath the windows for this reason, the idea being to take care of the cold air which will enter through the transoms. All radiators are clear of the floor, and affixed to the wall, thus enabling the floor beneath them to be cleaned easily.

When the exhaust steam remaining for use in the heating system is inadequate for this purpose, as it is assumed it will be at all times save in comparatively mild weather, live steam may be introduced into the main directly from the boilers, as it is tied in for that purpose. A reducing valve is used to cut this down to the proper pressure at the point where the main enters the hospital building proper. A 14-inch main carries the steam from the boiler-room and power-house into the hospital and to the point where the first distributing lines tap it, and from this point for the remainder of its length it is a 12-inch line. The larger distributing pipes are 6 and 7 inches in diameter, the smaller lines gradually lessening in size to the top of the building.

### Ventilation and Temperature Control.

The Johnson system of thermostatic regulation of temperatures is used throughout the building, in the wards, dressing rooms, isolation rooms and operating rooms, as well as in the control of the temperature of the air taken in through the ventilating system. The air is taken in for this purpose at a point in the basement of the administration building, heated at once to a temperature of 90 degrees, passed through an air washing machine and reheated, being delivered to the main ducts at a temperature of 75 degrees.

These main ducts measure 11 feet by 30 inches, and are covered in with masonry. The distributing ducts of the ordinary galvanized iron type, however are open. Ten fans are used in connection with the ventilating system. Of these the largest are a pair in the basement, which draw the heated air into the main ventilation ducts at the rate of 25,000 cubic feet per minute, and a pair of multivane exhaust fans at the top of the building, which discharge the "used" air from the entire ventilating system at the rate of 29,900 cubic feet per minute. The latter fans are operated at the rate of 235 r.p.m., the power being supplied by direct-connected motors of 22½ horsepower. There are four motors of this size used in the operation of the fans, the others running in size from 5 h.p. down to 1 h.p. for the smallest fan.

Overhead Installation of Both Water and Steam Pipes in the Basement Floor of the Louisville City Hospital.

The rooms which are to be ventilated by the hot-blast system, which, as indicated above, include the smaller spaces, such as the toilets, dressing rooms, and isolation rooms, as well as the large auditorium, are for the most part provided with open vents, without grills or screens of any kind, as these, it was decided, tend to collect dirt and dust. A simple white enameled frame is provided for each opening, one for the intake and one for the outlet, which are of course proportioned to the size of the chamber. An exception in the matter of the opening occurs in the case of the auditorium, in which, as set forth above, the air is passed through cloths before entering the room, in order that any possibility of infection from this source during operations may be avoided. In this room, also, on account of its size, individual exhaust fans are installed for the purpose of drawing out the air at the top of the room, whence it is discharged into the general discharge duct at the top of the building.

### The Vacuum Cleaner Installation.

An interesting feature from the standpoint of sanitation is the vacuum cleaner system which will take care of all of the dirt and dust which may find its way into any of the buildings. The unusual point about the system is that all matter collected by it passes into a conduit, instead of being taken into bags and emptied by hand, and is blown into the breeching of the boilers and is consumed, thus rendering it certain that no disease germs or other deleterious matter will escape to become a source of infection around the hospital or elsewhere. The system has a capacity of 250 cubic feet of air a minute.

Absolute cleanliness and ideal conditions in the handling of the immense volume of soiled linen which an institution of this size will produce is guaranteed by the fact that the laundry of the hospital is completely equipped with the most modern machinery for this purpose, the principal equipment being one closed tumbler, one 6-roll flat-work iron, two reverse body irons, one bosom ironer, two extractors, three dry-rooms, and one 110-inch mangle. The ventilation of the laundry is designed to be especially complete, in order to dispose of steam and odors, a high-speed exhaust fan being placed at one side of the room, and a hood over the extractors in the center of the room leading into the general ventilating system. Besides the usual cleaning processes employed in the laundry, the hospital is thoroughly equipped with ovens and baths for the sterilization of instruments, bedding, garments and mattresses.

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The board of education, of Dayton, O., will receive bids until 12 o'clock noon on October 27, 1914, for the installation of shower baths in the Edison school, the Emerson school and the Webster school, according to plans and specifications in the hand of the clerk of the board, in the Steele High School building, Main Street and Monument Avenue. Conditions of the bids and other information can be had on application to the clerk.

The contract for the construction of the new Elks' temple in Hamilton, O., including plumbing, heating and other details, has been let to W. C. Handspy & Son, of Zanesville, O., their bid of $62,743 for the whole contract being the lowest and most satisfactory to the committee. Bids were also taken for the general contract exclusive of plumbing, heating and wiring, and on this the same firm was also low, while the John L. Walker Co., with a bid of $10,201, was the lowest on the plumbing, heating, ventilating and wiring, which were lumped. It was finally decided, however, to let the contract as a whole, leaving the general contractor to sublet or otherwise take care of the plumbing, heating and so forth.

# Removing Bonnets from Steam Valves

## Damage to Threads and the Valve Itself will be Avoided if a Few Simple Suggestions are Followed

By W. H. WAKEMAN

WHENEVER a screwed bonnet is to be removed from a check valve, a globe gate or an angle valve, a monkey wrench is a very good tool for the job. It is better than a solid wrench, because it can be fitted tight on the bonnet, as shown in Fig. 1. The solid wrench would be as good if it was just the right size to be a tight fit, but it is safe to say that this desirable state of affairs is seldom found in practice. The largest available wrench should be selected for this purpose, because it will spring less when strain comes upon it. Having fitted the wrench as tight as possible, give it a quick pull, because the bonnet may be stuck on tight and the quick pull will be less liable to round the corners off than a steady pull.

The illustration shows a wrench in proper position to remove a screwed bonnet. Never put it on the reverse

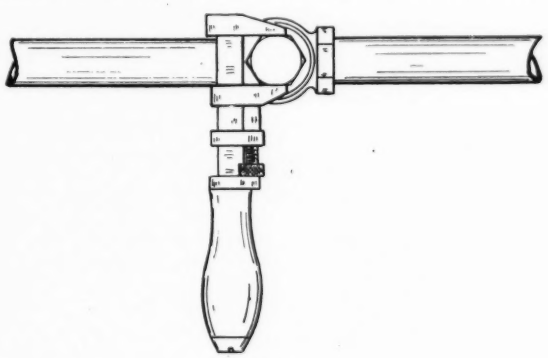


Fig. 1.

way unless it is in such close quarters that it is impossible to use it as shown. To unscrew the bonnet it is necessary to pull towards the right hand, but if the wrench is pulled to the left while in this position, to tighten the bonnet, it will spring badly, even if but little strength is exerted on it.

This valve is on a pipe line, where it is held firmly in place, but it is frequently necessary to use a second-hand valve that has been removed during the process of making changes and repairs about a steam plant. It is always proper to remove the bonnet from such a valve, and examine every part of it before putting it into service. It may require a new disc, or the threads may be badly worn.

On one occasion I found the threads on the stem of a globe valve unfit for further service. Removing the stem from an angle valve of the same size I put it in the globe valve, but found that it could not be opened wide enough to give full capacity. On another occasion an attempt was made to put the stem from a globe valve into an angle valve. It would open wide enough, but when closed the wheel was almost in contact with the stuffing box nut, and only about one thread was holding on the inside. These differences were due to the fact that the dimensions of such valves are not alike even for the same size.

When a detached valve is to be overhauled, it is a good idea to put a piece of pipe of proper size in the pipe vise, and screw the valve on it, not forcing it on, but tightening it with a wrench enough to make it hold. This is much better than putting the valve in an ordinary vise, as the jaws are sure to leave ear marks on it that are disgraceful. Of course the pipe above mentioned may be put in any vise that is convenient, but a pipe vise hold it better than any other.

When I first saw a steam-fitter put a Stillson wrench on the bonnet of a valve I thought it an act of vandalism pure and simple. This idea has not been completely

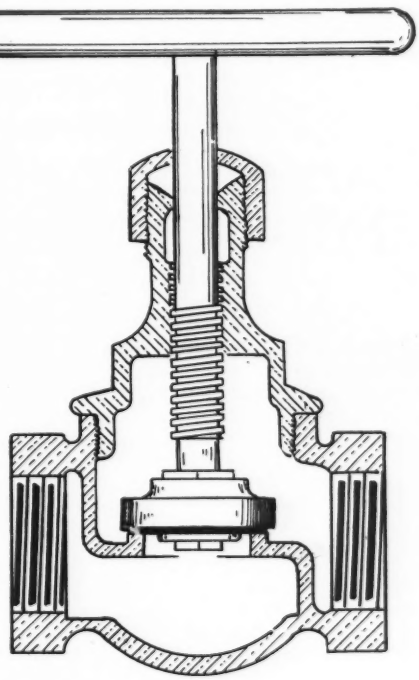


Fig. 2.

changed yet, but it has been modified for the following reason. When the bonnet must be removed from a valve that has been in use on a steam line for several years, it usually requires a strong effort to start it, and this frequently causes the monkey wrench to round off the corners, and in some cases it is impossible to remove the bonnet in this way. When a Stillson wrench is used for this purpose it does not slip, hence the bonnet comes off in good form. Of course there are the marks of sharp teeth on it, but these are less prominent than corners badly rounded off, and the application of a file soon provides a remedy. Always use a flat file with a safe edge for this service.

Sometimes a bonnet will leak after it has been removed and replaced, but this seldom happens if the surfaces designed to come in contact are thoroughly cleansed. The application of kerosene oil may be sufficient, but if not then use fine emery cloth, taking care to avoid removing

more brass in some places than in others, which is sure to cause leaks instead of preventing them. When a bonnet is replaced, it ought to be screwed down firmly into place, but not turned down with unreasonable force, as the brass threads may be stripped by the operation, or so nearly spoiled that they will fail in service, which means that somebody is hurt and perhaps killed by such management.

I was interested in watching a fireman attempting to remove a bonnet some time ago. The valve was closed, as shown in Fig. 2. He applied a large monkey wrench and loosened the bonnet. Before he could give it one-half

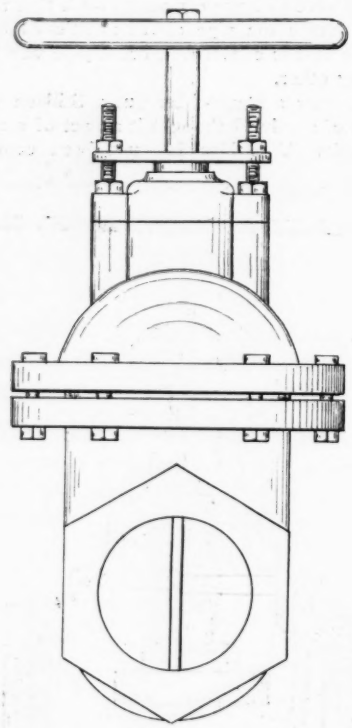


Fig. 3.

revolution it was tight again. He proceeded to apply more force to the wrench, but the only effect was to fasten the bonnet more firmly in place. After receiving necessary instruction along this line, he screwed the bonnet down into place again, opened the valve and then took off the bonnet without trouble or extra labor.

Examination of the illustration will show the cause of trouble in this case. As the valve was closed there was no chance for the spindle or stem to move either up or down. The thread on this spindle is very coarse, hence when the bonnet was unscrewed it tended to rise rapidly. The thread in the body is much finer, therefore the bonnet could not rise as rapidly as the spindle would make it. Of course a deadlock was the result until the disc was raised from its seat, by turning the spindle after which it turned with the bonnet regardless of the coarse thread which had no effect on its motion.

The foregoing refers to screwed bonnets, but Fig. 3 illustrates one that is bolted to the valve body. This represents a blow-off valve on a large boiler. The fireman was told to remove this bonnet and gate one day when the boiler was not in use. He removed the bolts and pulled out the gate without turning the spindle backward to open the valve. Having cleaned out the lower part of this valve, he inserted the gate, without turning the stem so far as he knew, but it is quite possible that it was turned on the spindle, or that the spindle was turned slightly in the direction necessary to close the valve. After the boiler was again put into service, it was impossible to open this valve because the gate was so tightly drawn into position.

Steam fitters frequently find it necessary to remove the bonnets of these valves in order to screw them into the desired position, because the line is so near a brick wall, or another pipe line, that there is not room enough to turn the valve with the bonnet in place. Care should be taken to know that the valve is wide open before the bonnet is taken off, because the gate is then drawn up out of the way, so that there is little danger of it being damaged. Very thin packing should be used in this joint, because the surfaces are true, hence there is no necessity for inserting thick packing which costs more in direct proportion to the thickness, and is more liable to blow out under pressure.

## THE TRADE PRESS MEN IN CONVENTION.

### Federation of Trade Press Associations Holds Profitable Three-Day Session in Chicago.

Our readers will pardon us, we are sure, if we say a few words at this time about *our* convention. Week after week throughout the year our pages record the various conventions and gatherings of the trade. But once a year there comes our own convention, that of the publishers of trade papers.

This year the Federation of Trade Press Associations held their meetings at the Congress Hotel, Chicago, on Sept. 24, 25 and 26. The gathering of publishers of trade and technical papers, embracing some 215 publications, was indeed impressive, nearly all being represented.

The keynote of the entire convention was struck in a speech by Prof. John D. Shoop, assistant superintendent of the Chicago Public Schools, entitled "Educational Opportunities and Obligations of the Business Press." From that time to the last day of the meeting it was evident that everyone was there to learn from the experience of others, and these others were not averse to contributing their mite to the general knowledge.

Of course the publishers, the editors, the advertising and the circulation managers all had their say. But what proved of immense value to everyone interested was the presence of men from the outside, who gave their impressions of trade papers from their standpoints. Three or four big men, each from the ranks of the advertisers, the advertising managers and the advertising agencies and the subscribers, put before the publishers their suggestions for the betterment of the trade press generally.

When such men as John N. Willys of the Willys-Overland Co., L. F. Hamilton of the National Tube Co. and John Lee Mahin of the Mahin Advertising Co. can be secured as speakers at such a gathering as this, it shows conclusively the strength of the trade press in the field of journalism, and the recognition of this strength by the speakers themselves.

One thing that impressed visitors as a desirable feature of any convention, was the promptness with which the meetings began and the adherence to schedule with which the program was carried out. Entertainment of any kind was a notable omission, and with the exception of a lunch by the Chicago Trade Press Association on the opening day, nothing was allowed to detract from the interest in the sessions of the convention.

# Questions and Answers

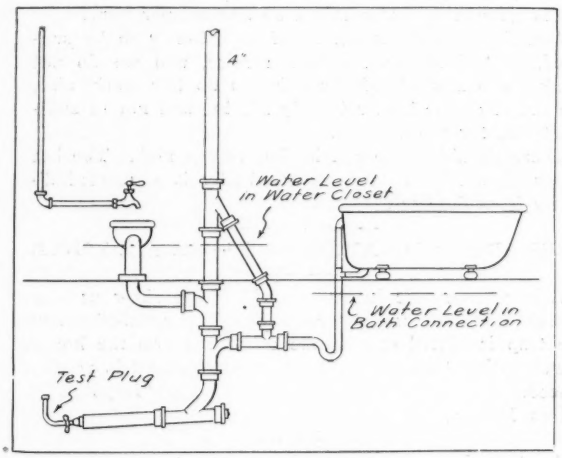
## A PROBLEM IN TESTING.

Editor "Domestic Engineering:"—A short time ago the question came up as to the exact reason why the job as shown in sketch below could not be satisfactorily tested. In the sketch are a toilet and a bath tub, which is to be tested in a finish after the fixtures are set. The nature of this job is such that the water will not fill in the bath tub to the level to that in the toilet bowl. You will note in the sketch a test plug in the end of soil pipe with the water entering the bowl. We believe air is the cause, but want to know why this occurs.

California. "Inquirer," Committee of Plumbers.

"Inquirer's" sketch is shown in our illustration.

As far as we can see, the conditions under which the




Answering "Inquirer."

water tests are applied are entirely normal; just such conditions as would be met in almost any job.

If the bath plug is out, and the overflow open, there is no reason why water should not rise in the bath tub to the same level as in the water closet, unless there is a complete stoppage in the bath waste, which is hardly to be expected.

If, however, the bath outlet and overflow are both plugged, air in the upper part of the waste and the overflow would prevent the water rising to as great a height as in the water closet bowl.

With a free passage for the air at the bath tub, we cannot see why the principle which causes water to seek its own level, would not allow the water to maintain the same level in the piping.

## SUGGESTS ANOTHER METHOD TO CURE SICK SYSTEM.

On page 95 of your issue of July 25, 1914, I notice a sketch under the heading "Sick Hot Water Supply System." The whole trouble with this installation is that it is improperly made, and I am enclosing herewith a sketch showing correction, which, if followed, will give satisfactory results.

Boston, Mass. Elmer S. Stack.

In our Fig. 1 we show the sketch submitted by corre-

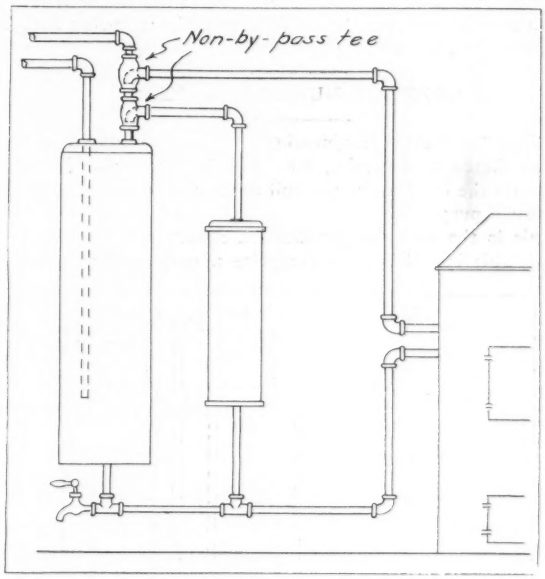



Fig. 1.

spondent, and in Fig. 2 a sectional view of the patented non-by-pass tee recommended by him.

The connections from gas water heater and furnace coil shown in the July 25th issue are the connections ordinarily made. The heater would be used in the warm months, when the furnace is not in operation, the furnace coil

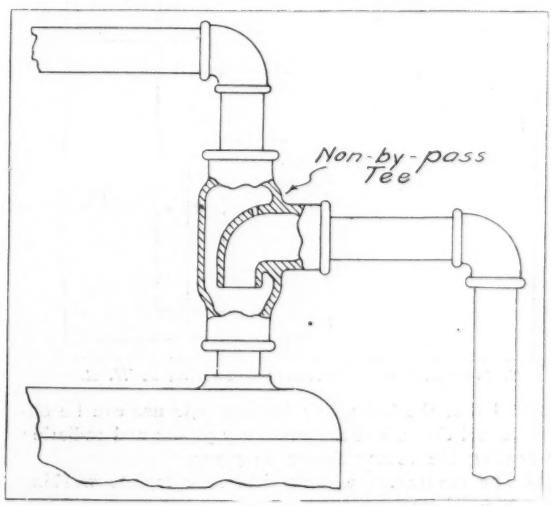



Fig. 2.

doing the work at other times, and generally there would be no trouble from the connections as shown.

The non-by-pass tee may be new to many of our readers, and we therefore present the arguments advanced in its favor.

The purpose of this fitting is to overcome the drawing-in or mixing-in of cold water with the hot water at branch connections, where flow connections with heaters are made with ordinary tees. The makers claim that this non-by-pass

tee will absolutely prevent by-passing by preventing the circulation of water through the heater from any other cause than that of gravity circulation, which results from the heating of the water.

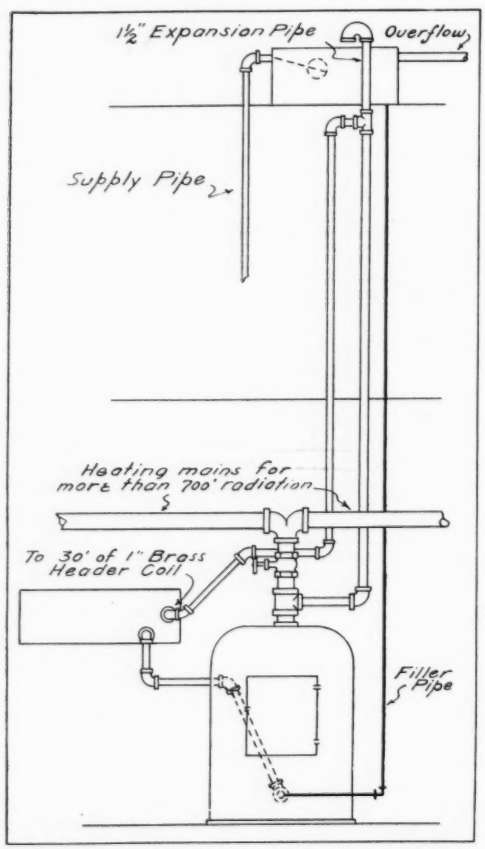
It is also claimed for this fitting that in addition to the prevention of by-passing, it also permits hot water from the heater to pass directly to fixtures without having first to enter the boiler.

## A GARBAGE BURNER PROBLEM.

Editor "Domestic Engineering": "I am sending you a rough sketch of a heating job. The inspector and I disagree on the location of the coil for heating the water for domestic purposes.

This is the way the specification reads:

(1) This installation to comprise a garbage burner so




Garbage Burner Connections; Answering P. W. E.

arranged that the hot water for domestic use can be obtained at all times, and the necessary piping and radiation for heating the rooms shown on plans.

(2) The contractor will furnish, in complete working order, the following—

(3) The garbage burner to be arranged with brass coil standard iron pipe size, of sufficient heating capacity to furnish adequate water supply at all times.

You will note there is a valve on the supply main for shutting off the heating main during summer time, at the same time using the burner for burning garbage and heating hot water for domestic use. The inspector claims the coil should be in the fire box of boiler. I claim not, for the reason that the burner would soon generate steam and boil all water out of furnace, and cause a good deal of noise in the expansion pipe when main system is shut off.

I have installed the coil in the hot water tank. Please give me your idea on this subject. The main and return are covered, also burner.

Oregon. P. W. E.

Garbage burners or incinerators used for heating domestic hot water, are of two kinds—those which are used as hot water heaters (similar to a tank heater), in which there is a cradle or compartment above the fire, into which the garbage is dumped, and those which are built in the form of an incinerating furnace.

In the latter, the water for domestic use is heated by a coil placed inside the heater, in such a position that it will receive the heat from the fire, and the water from the coil is connected into a storage tank in the same manner as from a tank heater.

Some of these garbage burners are of such size that they are used for heating the building. The apparatus shown by correspondent is a saddle shaped wrought iron or steel boiler mounted on a cast iron base. The cradle for holding the garbage is composed of water tubes run horizontally from side to side, through the combustion chamber of the boiler. The rated capacity of this heater is 800 gallons of water raised 50 degrees per hour.

Something over 700 sq. ft. of radiation is to be supplied, in addition to the tank service, and we do not think the heater of sufficient size to do this work; also, the outlet of the heater is only 2½ in., and not of sufficient size for the purpose.

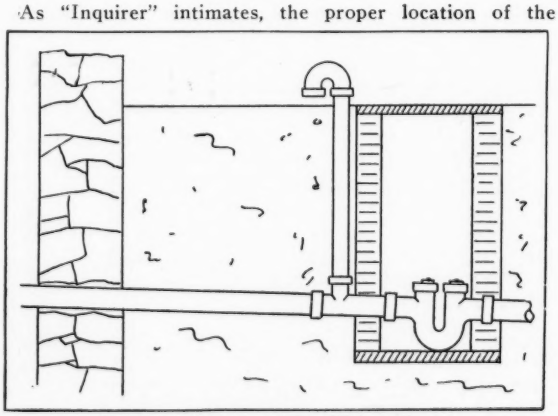
There should be no coil in the storage tank. The hot water circulation to the storage boiler is connected directly from the heater.

## ASKS ABOUT LOCATION OF FRESH AIR INLET.

Editor "Domestic Engineering." Please show us how a main trap and fresh air inlet should be installed, when the trap is placed outside the cellar wall, on the house sewer, rather than on the house drain where it is usually placed. "Inquirer."

Des Moines, Ia.

As "Inquirer" intimates, the proper location of the



Answering "Inquirer," Des Moines, Iowa.

main trap is inside the cellar wall, on the house drain, but sometimes it is impossible to so locate it, and it must go in on the house sewer outside the cellar. In this location a tile trap may be used.

It should be set in a manhole so that it will be accessible for cleaning purposes. The fresh air inlet would rise directly to the surface, and to prevent entrance of

foreign matter the upper end should be provided with a return bend, as shown in our illustration.

## LOCAL VENTING OF URINALS.

Editor "Domestic Engineering": Enclosed find a rough sketch of a urinal in a partition. Is the local venting properly done? It is run into a chimney which is not

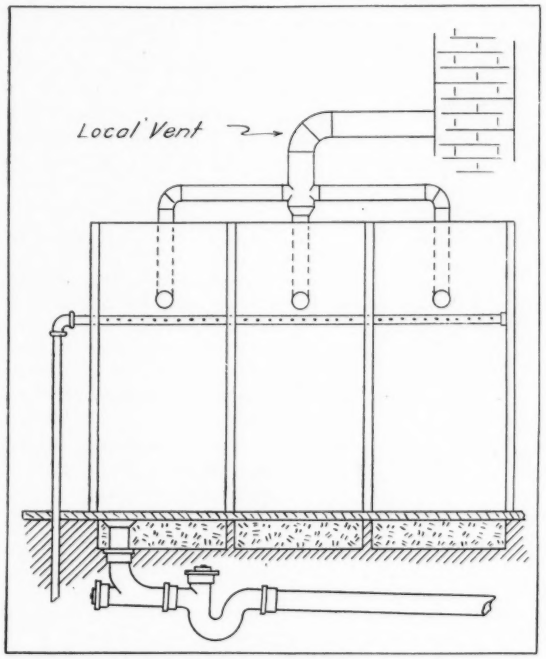



Fig. 1, "J. B. M."

in use during five months of the year. Will there be sufficient draft if the temperature is lower where the urinal is located than it is where the chimney extends through the roof? J. B. M.

Massachusetts.

"J. B. M.'s" local vent problem is shown in Fig. 1. As

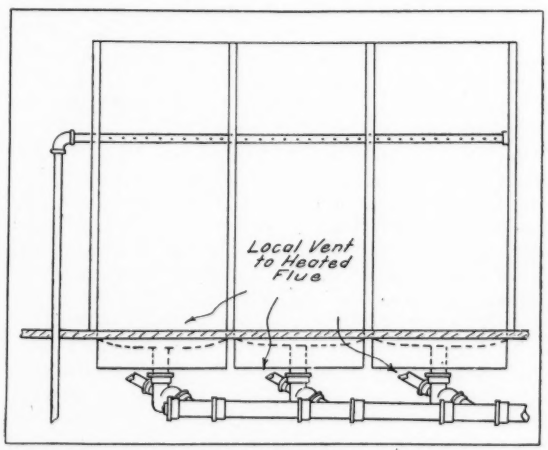



Fig. 2, "J. B. M."

will be seen, the connection for each stall is made through the slate back.

When the chimney is heated, there can be no better method than to connect the local vent into it, the heated gases rising through the chimney creating a draught which should do excellent work in local venting the urinal.

When there is no heat in the chimney, we believe that there will still be some circulation, which will produce some degree of ventilation, although it will naturally be far less efficient than when heated.

During the five months that the flue is not heated,

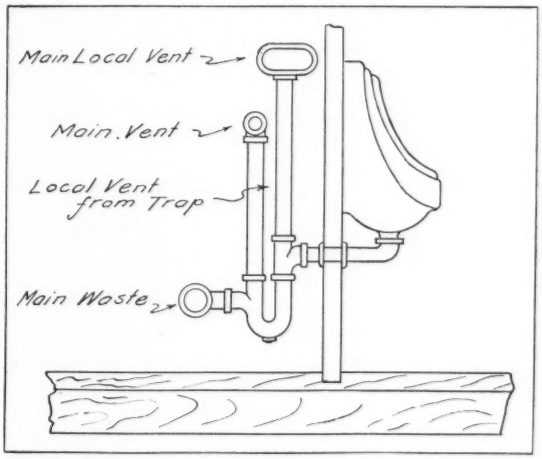



Fig. 3, "J. B. M."

windows will be open, which will in some measure at least, help the situation. A revolving ventilator on top of the chimney will be of assistance in creating a circulation. A method sometimes followed under conditions mentioned by "J. B. M." is to connect a gas jet inside the chimney, at a point below the local vent connection. The heat from this gas jet will be of great assistance in creating a circulation of air.

It will be noted that the local vent openings are at quite a distance from the floor, and the odors from the use of the fixture will have opportunity to pass into the

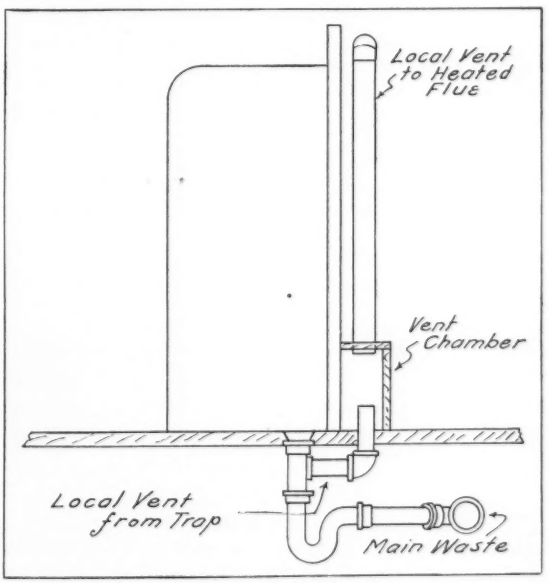



Fig. 4, "J. B. M."

atmosphere of the room, instead of being carried off directly they are created.

For this reason we think the methods shown in Figs. 2 and 3 superior to "J. B. M.'s" method. With a good draught, the odors will be drawn into the local vent pip-

ing quickly, before they have a chance to become diffused in the air of the room.

This, however, is not a criticism of "J. B. M.'s" method as the waste arrangements are not the same as his. These two methods are adaptable to lines of urinals such as found in large public toilet rooms.

It may be of interest in this connection to refer to Fig. 4 also, as showing another method of local venting another form of urinal. So far as we can judge we do not see that "J. B. M." can do any better than to continue using the local vent system as it now is, with the possible adoption of our suggestions for increasing its efficiency.

## A PLUMBING INSPECTOR WITH A SYSTEM.

### Wm. R. Marshall, "Domestic Engineering's" Special Representative, Sees an Efficiently Managed Department.

When you want to know anything about a water or sewer connection in Long Beach, California, they all say ask Charlie Murphy. He can tell you right off the bat all about it. So many feet from the building line, so deep at the entrance to the building, depth at curb, depth in street in feet and inches. Yes, inches!

This up-to-date and efficient inspector, keeps a card sys-

| | |
|---|---|
| NO. 890 | STREET Pine |
| Owner Frank Brown. | Description of Building Frame |
| Contractor Smith Plu Co. | Purpose to be Used Res. |
| Fixtures 7. | New or Old New Stories 2. |
| Plumbing Permit No. 2546 | Front or Rear Front |
| Sewer Permit No. 5001 | Cesspool or Sewer Sewer |
| Cost 3500.00 Fee 2.00 | |
| 1st Inspection 6-5-14 | 2d Inspection 8-6-14. |

One of the Record Cards Used by Inspector Murphy.

tem on every job and a record of every thing that happens to it. A reproduction of his record card is shown herewith, illustrating his method of recording plan and elevation. The reverse side is used for record of location, owner's name, plumber's name, building, fixtures, inspection, etc.

Charles B. Murphy came to California from Denver Col., 10 years ago and since 1906 has held his present po-

| | | | |
|---|---|---|---|
| NO. 890 | STREET Pine | | |
| Owner Frank Brown | Lot 6 | Block 10 | |
| Contractor Thomas | Y in | | Street |
| District ~~Fixtures~~ 5 | Y in North + South | | Alley |
| ~~Plumbing Permit~~ No. 4251 5 | Between 8 | | |
| Sewer Permit No. 5001 | and 9 | | |
| Inspected 5-10-14 | Murphy | | Inspector |

Another of Mr. Murphy's Cards.

sition as chief sanitary inspector of plumbing and sewers.

Alive to the requirements and necessities for a modern plumbing and sewer code, he has fathered and fought for an ordinance regulating and enforcing such installation. With the help of a committee appointed by the master plumbers and one appointed by the journeymen, he has finally succeded in having passed by the city council a strictly up-to-date code, which went into effect Aug. 1, 1914.

This ordinance provides that any person, firm, corporation or association who wishes to conduct a business or calling of a master plumber or to work as a journeyman plumber, must pass a practical examination before an examining board which will consist of two master plumbers, two journeyman plumbers and the city health officer.

This examining board has just been appointed by the mayor, and is made up as follows: Max Morlock and Thomas E. Williams, master plumbers; Albert Lingrenn and Ray Fletcher, journeymen and Dr. Taylor, health officer.

In addition to a certificate of competency a license fee of $50 per annum is demanded.

The ordinance as passed embodies all the principal rules of the largest cities' most rigid sanitary requirements, and is expected to bring the plumbing work done here up to as high a standard as is required any place.

Latrines, range or washout closets are prohibited; all sewers which lie under or in any building must be of cast iron pipe, tar coated inside and out.

Congratulations to Charles B. Murphy for the good work started and here's hoping his reward will be fully up to his expectations.

## A SELLING TALK FOR MASTER PLUMBERS.

### The Shower Bath a Big Factor in Present Day Civilization. Sale Should be Pushed.

"Shower baths installed in manufacturing plants for workmen tend to lessen fatigue and develop efficiency. It makes for cleanliness and health, and might be classed under the head of business economy and scientific management." Thus speaks Dr. Thomas Darlington, former Health Commissioner of New York City. Here is a selling argument for master plumbers which merits attention, and which progressive craftsmen can use to good advantage in making customers out of prospects.

His views, which we print herewith, are interesting:

"Not only internally, but also externally, water plays a part in lessening fatigue. So the benefits derived from general bathing should be mentioned. These have been recognized for many centuries and the therapeutic use of the bath is as old as the art of medicine itself. The public baths of the Greeks and Romans were a prominent feature of their civilization. Recently hydro-therapy has received much study and has become more of a science. The capacity of water for heat makes it valuable for use in extracting heat or in applying heat.

"As the skin covers a network of blood vessels and nerves, water can be used to effect a physical reaction.

"By means of a shower bath the skin is mechanically stimulated by the striking drops. This combined with thermic influence increases the effect of the bath upon the heart and respiration. It also affects metabolism. It increases the production of animal heat. The heart action is increased in force. The secretion of the skin is diminished. It increases the urine and other internal secretions. Examination of the blood shows certain changes in the elements of the blood itself. Thus water, through the skin, affects secretion, excretion and the heat regulating function.

"Shower baths may therefore, be use to eliminate more rapidly the products of waste, to promote secretion, to relieve fatigue, to restore the normal functions to various organs of the body, to restore the body temperature to the normal, and produce a redistribution of the blood when there is congestion in any one part of the body."

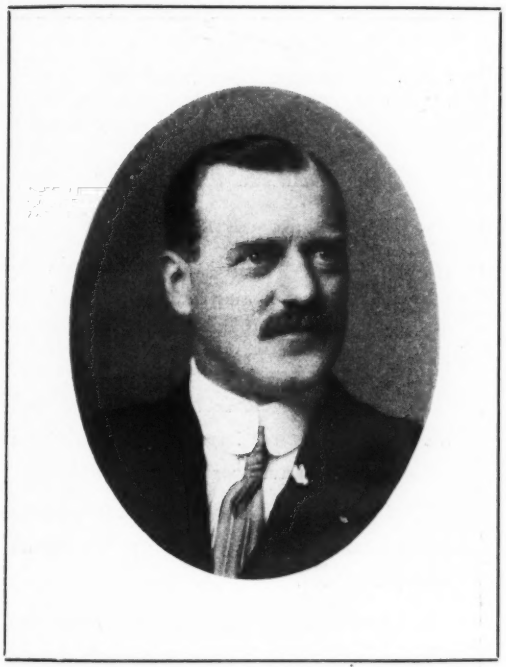
# Little Sidelights on Men in the Trade

## A Craftman of High-Geared Efficiency

SCIENTIFIC management and the gospel of efficiency in modern business and industry have become terms of tremendous import. Millions of dollars have been spent to inaugurate methods that will prevent labor waste, and make better workmen and better products in less time than formerly.

Efficiency experts are now a part of the personell of the executive departments of great and thriving industries. These men are constantly studying ways and means to improve the scheme of plant and office operation, until labor and machinery are finally put under a system of scientific adjustment that produces astounding results.

The spirit of efficiency has today permeated the entire fabric of American business life, from the small shop to the vast manufacturing plant. Adherence to its rules makes for wealth and prosperity in all avenues of business endeavor.



George S. Bray, of Pennsylvania.

Methods of efficiency are assets in the operation of any business, and especially is this true in view of the strong pressure of modern competition. Thus to conduct any business, great or small, at a progressive profit, much consideration must be given the question of efficient management from various standpoints.

Among the various professions engaged in the arts and sciences, there is today one class of men who are very rapidly waking to the fact that efficiency means progress and prosperity and that its antithesis—inefficiency, spells defeat and ultimate failure.

This class of business men—the conservers and preservers of the public health through the medium of sanitary plumbing in all its phases, is steadily evolving from the old-school ways of business operation, and joining the ranks of the new school of efficiency converts.

The plumbing and heating establishments which are conducted according to the principles of scientific management, from the correct figuring of overhead expense to the fullest utilization of labor and material, are certain to be in a position to progress from a profit point of view.

An interesting instance of a shop operated along lines that spell profit and success is to be found at Wilkes-Barre Pa., where George S. Bray, president of the Pennsylvania Master Plumbers' Association lives, moves and has his being as a craftsman. His office and shop are run according to the latest principles of scientific management. The apearance of his shop merits the exclamation—"A wonderfully efficient system." In the rear of his establishment where the tools and materials are stored, everything bespeaks order and system, and thus the operation of his business, runs along with remarkable harmony, eliminating practically all lost motion and labor waste.

It was after years of studious endeavor to solve the problem of shop and office efficiency, that he finally worked out a system that would suit his needs. Applying his alert and original point of view to the question in hand, he was able in due time to formulate a scheme that would adequately govern the conduct of his business.

George S. was born March 25, 1875, at Honesdale, Pa. He was educated in the local public schools, and later attended trade schools in New York City, where he laid the foundation for his progressive methods of running a plumbing and heating establishment.

After graduating with honors, in 1894 he entered the field of plumberdom as an apprentice for the firm of Bell & Purdy of Carbondale, Pa. In 1895 he came to Wilkes-Barre and worked for a few years as a journeyman, until in 1898, when he opened a shop at Kingston, Pa., a suburb of Wilkes-Barre.

As an apostle of the gospel of efficiency, Mr. Bray saw the need of inculcating apprentices and budding journeymen with the spirit of thoroughness and system in their work, and so after establishing himself in business, he organized the Order of Junior Mechanics which has proved a helpful proposition in and about Wilkes-Barre.

As a sideline, Mr. Bray organized the Keystone Motor Car Company, comprising a line of trucks and pleasure vehicles, for which he has the sales rights in his community.

As an association man he has always been held in the highest esteem and has been regarded as one of the shining lights of the state organization.

In fraternal circles he is widely known as a Shriner and an Elk whose presence in the lodge rooms has always had an uplifting and felicitious influence.

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Herbrick & Lawrence, 607 Church Street, Nashville, Tenn., have the contract for work on the North Nashville branch of the Carnegie Library.

R. H. Vandevelde & Co., plumbers of Dyersburg, Tenn., report they had a fair summer trade but that business is a little quiet now. They recently completed the plumbing in the city hospital.

The largest job in progress now at Dyersburg, Tenn., is the remodeling of the Virginia Hotel. The plumbing and heating work on this job is being done by H. W. Thompson. Mr. Thompson has also done considerable pipe work for the city this season.

# Keen Interest in Window Display Contest

## Master Plumbers and Fitters of Various States Send in Photos of Window Exhibits for Entry in the Contest

SINCE the announcement of the window Display Contest, inaugurated by "Domestic Engineering," many photographs and congratulatory letters have been received by the editor. One master plumber, living in New York state, writes that upon reading of the contest the other week, he immediately "got busy," and called in his two apprentices talking war in the back of the shop.

"Here, boys," said he, "cut out the war stuff, and get down to business. Wash that window glass and start trimming up our window display. "Domestic Engineering" is offering some prizes for good looking displays and we want to win one of 'em."

Another craftsman, down in Alabama, writes that he has his window looking "fine and dandy," and that he called up the local photographer and requested him to come over in the evening and take a picture of the display under electric lights. "Night photographs," says this plumber, "will bring out more detail and fine points than a picture taken by daylight."

**Conditions Governing the**

**WINDOW DISPLAY CONTEST**

**in "Domestic Engineering."**

**1. The contest is open to all master plumbers and steamfitters who are paid up subscribers to "Domestic Engineering," at the time the photograph of the display is received.**

**2. The contest closes November 2nd, and the decision of three impartial judges will be announced on November 16th.**

**3. The prize for the best display window will be $25 in cash; the prize for the second best $15 in cash.**

**4. Photographs that receive honorable mention will be paid for at $1.00 each.**

### Henpecked by His Good Wife.

And still another man in the trade, writing from Maine, states that he has secured the co-operation of his wife in fixing up his shop window in a manner that will "make a hit with the public." He writes: "My wife was looking through the pages of 'Domestic Engineering' the other day, and noticing the prize offer for the best window display, she commenced to henpeck me about the fierce looking condition of my shop window. 'John, I'm going to insist that you clean up that window out there in the front office. Why, it's a wonder that people don't run away from the shop when they see that dusty, cobwebbed window.' My wife was worrying the life out of me for several days about that window, until I finally got kind of fussy about the matter and pitched right in and fixed up a display that certainly is a dream. I never thought that a window could be made so attractive to the eye. I will have it photographed, and you will receive the picture within the next few days."

### Window Displays Good Publicity.

A prominent master plumber and fitter of Chicago in forwarding a photo of his display window to be entered in the contest, writes the following interesting letter:

"The live and progressive plumber and fitter of today realizes to the full the publicity value of a neat and attractive shop window display. In this age of keen competition in all branches of trade, it seems to me that it is practically suicidal to neglect to recognize the value of a good window display in the struggle for business. The master plumber is a merchant to a large degree, and as such he is on a level with every other kind of merchant. Such being the case, it becomes his bounden duty to leave no stone unturned in announcing himself and his business to the world. The window display is one of the modern merchant's strongest assets in its trade pulling power, and no successful merchant would for a moment permit his window display to 'go to seed.' The same argument applies to the master plumber and fitter who would aspire to pick the plums of profit in the field of sanitary plumbing."

Note that the contest closes on Monday, Nov. 2, and that the announcement of winners will be made Nov. 16.

### CONDUCTS SUCCESSFUL PLUMBING BUSINESS.

T. E. Norton, of Mendota, Ill., whose up-to-date plumbing store is shown in the accompanying illustration, has been located in his present quarters for the last five years. He has done a large amount of work not only in Mendota, but also in the surrounding territory, and he has the reputation of being a regular salesman among the farmers, a part of his work which he is very fond of and in which he uses his trusty automobile to good advantage. He carries a large stock of plumbing goods and is thus able to meet all demands promptly. His working force consists of eight men and a bookkeeper.

Shop of T. E. Norton at Mendota, Ill.

# Business Methods for the Plumber and Fitter

## XIX.—The Training of Men for Efficiency, Leading Up to Its Application in the Plumbing and Heating Business

By WESLEY A. FINK

IN a late issue of "System," Wheeler Sammons states: "Costs are greater," says the manufacturer. "Net earnings are lower," states the shipper. "Margin of net profit is close," the wholesaler and retailer respond. "Prices are higher," adds the consumer. "Cross-section any record of accounts, from cost of making to household budget, and you find the same slowly-shrinking percentage left over for profits.

"It's a big problem. Reasons given are as unsatisfactory as they are many; politics, scarcity of gold, rapid development of new wants, extravagance, wild financing. Many theories are advanced, few facts. Business men face facts, not conditions. So out of business has come a nation-wide questioning. National bodies of manufacturers, wholesalers, retailers, bankers, shippers, are asking not alone why profits are dwindling in many lines, but how to stop them with conditions as they exist. Variations in the expense account, no matter how slight, point success or failure today because the cost of doing business, rising with the advance in rentals, wages and supplies, has cut down the net profit on sales. Manufacturer, middleman and retailer are all three straining with equal power to keep up with their costs; and the consumer calls his struggle the high cost of living."

In the olden time, when the writer worked as apprentice and later journeyman plumber, we never heard the word efficiency used as it is now, and cost systems also were unknown, or at least the name was. But is efficiency, now that it is the object of so much special effort and study, any more earnestly desired or more highly esteemed than it was then? Is not the present vogue of cost system merely the evidence of a common conviction of the value of closer bookkeeping?

Give every man the same income as every other man, and how long will the incomes remain equal? Inequality would begin to develop immediately, for the simple reason that some men are efficient and some are inefficient.

In "Principles of Scientific Management," F. W. Taylor states, "The remedy for inefficiency lies in scientific management, rather than in searching for some unusual or extraordinary man." Owing to the fact that workmen in all of our trades have been taught the details of their work by observation of those immediately around them, there are many different ways in common use for doing the same thing, perhaps forty, fifty or a hundred ways of doing each act in each trade, and for the same reason there is a great variety in the implements used for each class of work. Now, among the various methods and implements used in each element of each trade there is always one method and one implement which is quicker and better than any of the rest. And this one best method and best implement can only be discovered or developed through a scientific study and analysis of all the methods and implements in use, together with accurate, minute motion and time study. This involves the gradual substitution of science for rule of thumb throughout the mechanic arts.

Under all of the old systems of management each workman was left with the final responsibility for doing his job practically as he thought best, with comparatively little help and advice from the management. Under scientific management, in order that the work may be done in accordance with scientific laws, it is necessary that there shall be a far more equal division of the responsibility between the management and the workmen than exist under any of the ordinary types of management. Under scientific management the managers assume new burdens, new duties and responsibilities never dreamed of in the past. The managers assume, for instance, the burden of gathering together all of the traditional knowledge which in the past has been possessed by the workmen and then of classifying, tabulating and reducing this knowledge to rules, laws, and formulae which are immensely helpful to the workmen in doing their daily work. They develop a science for each element of a man's work, which replaces the old rule-of-thumb method.

They also scientifically select and then train, teach and develop the workman, whereas in the past he chose his own work and trained himself as best he could. The management takes over all work for which they are better fitted than the workmen, while in the past almost all of the work and the greater part of the responsibility were thrown upon the men. Thus all of the planning, which under the old system was done by the workman, as a result of his personal experience, must of necessity under the new system be done by the management in accordance with the laws of the science; because even if the workman were well suited to the development and use of scientific data, it would be physically impossible for him to work with his tools and at a desk at the same time. It is also clear that in most cases one type of man is needed to plan ahead, and an entirely different type to execute the work. The man in the planning room, whose specialty under scientific management is planning ahead, invariably finds that the work can be done better and more economically by a subdivision of the labor; each act of each mechanic, for example, should be preceded by various preparatory acts done by other men.

In the succeeding articles the writer will attempt to explain specifically how the principles of scientific management and subdivision of labor, as recommended by F. W. Taylor, can be applied to advantage in both the plumbing and heating trades.

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### NEWS NOTES FROM NEW JERSEY.

Clark & Burne are new members in the Masters ranks in Newark, N. J. They are located at 259 Warren Street.

Huegel & Tittlbach recently engaged in the plumbing and heating business at 318 Bank Street, Newark, N. J. J. Tittlbach and C. Huegel compose the firm.

F. J. Geiger, of Passaic, N. J., has secured all the present and future beer pump work in the state of the Hygeia Brewing Co. High pressure is Mr. Geiger's specialty.

D. Masteroberte, of Garfield, N. J., is installing a new heating system in the plant of the Union Novelty Braid Works. He also has an exceptionally fine installation of plumbing and heating in the new residence for Jno. Hampon.

At the Jersey City Outing. First group, left to right, H. F. Otis, Miss Lillian Sprwak, Geo. Grossman, B. F. Stolinsky, Mrs. Geo. Grossman and L. A. Mahein. Second group, T. Walsh, with the Misses Edna Goodrich and Mary Smith. Third group, S. J. Marshall, A. L. Kelly, Mat Maloney, Chas. Englert and J. J. Sharrock. Photos by "Domestic Engineering."

## JERSEY CITY MASTER PLUMBERS' OUTING.

The eleventh annual outing of the Master Plumbers' Association of Jersey City, N. J., took place on Saturday afternoon and evening, September 26, when over two hundred "Domestic Engineers" of both sexes enjoyed themselves to the full under the most cheerful auspices.

The merry-makers assembled at Five Corners, Jersey City, shortly after noon where they filled five special trolley cars and journeyed therein to Overpeck Park, Ridgefield Park, N. J., a pleasant two hours' ride from the city.

Immediately upon arrival the picnickers besieged playground and hotel; the baseball enthusiasts, to open the annual contest between the plumbers and salesmen, while the ladies and others of the party took to the launches or row boats on the lake.

At the National game the plumbers early took the lead and proved their superiority over their supply friends with brilliant playing. Score—who can tell? The line-up follows:

Plumbers—Crane, p; Mahein, c; Maloney, 1b; Clark, 2b; Fabian, 3b; Sharrock, rf; Werner, Jr., lf.; Werner, Sr., cf; Snyderman and Haley ss.

Salesmen—Boyd, p; O'Brien, c; Mullen, 1b; Moore, 2b; Heim, 3b; Donovan, rf; Dorscher, lf; Hinne, cf; Grunewald, ss.

Umpire—Demmery.

The athletic games also came in for a deal of attention.

The potato race for ladies was won by Miss Joans, first, and Miss Chandless, second. The former received a handsome silver ladle and the latter a china vase.

In the egg race for ladies Miss Baeher received a cut glass nappy dish and Miss Joans a gold jewel case.

The salesmen's 100-yard dash—Mr. Kane, a box of cigars, and Mr. Grunewald, a silver cigarette case.

As winner in the sack race Paul Johns received an ash tray.

A. Harris and L. Mahein won the three-legged race and received a penknife and a patent self-lighter, respectively.

The 100-yard dash, open to all, went to J. T. Edge. He was awarded a box of cigars.

The dinner, which is always a feature of the Jersey City picnic, was announced shortly after 6 o'clock. Everyone found sufficient of the good things provided to amply satisfy a keen appetite.

Another feature, which played a prominent part in the day's sport, was the prize bowling matches. The games continued throughout the afternoon and evening. The prizes were: For men: First, $5.00; second, $3.00; third, $2.00. In the ladies' contest a nappy dish went to Mrs. Joist, a whipped cream bowl to Mrs. Chas. Werner and a set of ice cream spoons to Mrs. Shopman. Many of the supply and manufacturing houses in the trade donated useful and valuable prizes which contributed to the interest and the success of the outing.

Dancing was the order of the evening for the younger element and until a late hour the merry party thronged the floor tripping the light fantastic to the tune of the latest trots and one steps until a late hour.

Some of the Jersey City Picnickers in the Grass.
Photo by "Domestic Engineering."

The committee which received the well-deserved praise of the picnickers was composed of J. T. Edge, chairman; A. Harris, J. J. Corcoran, Joseph Sproules, H. A. Cohendet, William Barclay, Sam Crawford and Joe Snydermann.

### His View Of It.

An Englishman and an Irishman went to the captain of a ship bound for America and asked permission to work their passage over. The captain consented, but asked the Irishman for references and let the Englishman go on without them. This made the Irishman angry and he planned to get even.

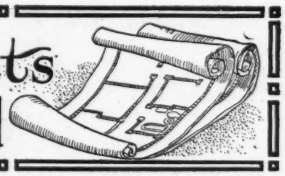
One day when they were washing off the deck the Englishman leaned far over the deck, dropped the bucket and was just about to haul it up when a huge wave came and pulled him overboard.

The Irishman stopped scrubbing, went over to the rail, and, seeing the Englishman had disappeared, went to the captain and said: "Perhaps yez remimber whin I shipped aboard this vessel ye asked me for riferances and let the Englishman come on widout them?"

The captain said: "Yes, I remember."

"Well, ye've been decaived," said the Irishman; "he's gone off wid yer pail."

# Contracts Awarded



Arcola, Ill.—Harvatt & Beazley have been awarded the contract for installing a steam heating system in the Christian church.

Negaunee, Mich.—Swanson Bros. have been awarded the contract for remodeling the plumbing in the Dickinson county court house.

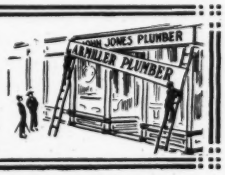
Milwaukee, Wis.—Rhode Bros. have been awarded the contract for the installation of the plumbing and heating system in the new free library.

Hibbing, Minn.—P. C. Clark has been awarded the contract for the heating plant to be installed in the municipal green house. Consideration $1,346.

Grand Rapids, Mich.—The Knee Heating Co. has been awarded the contract for a vacuum heating system to be installed in a new house on Logan Street.

Burlington, Ia.—The Burlington Plumbing & Heating Co. has been awarded the contract for the plumbing and heating to be installed in the new home for nurses of the Burlington hospital.

# Business Changes




Miller Brothers, in Newark, N. J., have moved into attractive new quarters at 106 Belmont avenue.

J. C. Hammer, Chillicothe, Ill., has moved his plumbing shop to the H. C. Pettett Building, corner Second and Walnut Streets.

C. E. Davis & Son, of Atchison, Kas., have moved their plumbing shop from 729 Commercial Avenue to 509 Kansas Avenue.

C. F. Pope, of Westfield, N. J., who entered the plumbing field as a master three years ago, recently opened new and better quarters at 428 North Avenue.

Chas. Brynelson, junior member of the plumbing firm of Brynelson Bros., Sunnyvale, Cal., has sold his interest in the company to Henry Bull of Santa Clara. The firm name hereafter will be Brynelson & Bull.

# Obituary

### F. F. Leibrandt.

F. F. Leibrandt, a well-known master plumber of Chicago, who conducted a successful business at 3029 South State Street, died recently following a stroke of paralysis. He had been in ill health for the past four years. At one time he was connected in business with C. F. Taffe, of Chicago, under the firm name of Taffe & Leibrandt. Mr. Leibrandt was in his 44th year, and for over ten years had been an active and esteemed member of the Chicago Master Plumbers' Association. The funeral was conducted from his late home, and the pallbearers were: C. F. Taffe, George Hazard, Charles Roche, Fred Lindstrom, John Goodbrand, and F. J. Fruin, all of Chicago.

### David E. Rowley.

David E. Rowley, connected for the past eleven years with the H. Mueller Manufacturing Co., of Decatur, Ill., died at his home in Indianapolis, Ind., on September 18th. His death was due to pernicious anemia. As a representative of the Mueller concern he had earned the high esteem of a wide circle of men in the trade, all of whom will sincerely regret to hear of his demise. For the last few years he was manager of the Indianapolis office of the company. Mr. Rowley was a comparatively young man, being in the early forties at the time of his death.

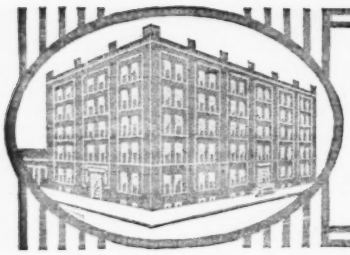
The Late David E. Rowley.

The funeral was held in Indianapolis on September 21st, under Masonic auspices, interment being at Crown Hill cemetery. Among the many floral tributes received, the most elaborate came from the Decatur office of the H. Mueller Mfg. Co. He is survived by his wife.

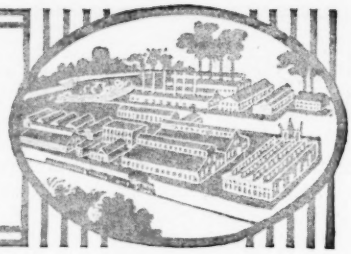
### J. J. Houlihan.

J. J. Houlihan, chief boiler inspector of Chicago and secretary of the board of examining engineers under Mayor Busse, died Sept. 27th, at the Garfield Park hospital of pneumonia, in his 55th year. Mr. Houlihan was well known among western master plumbers and steamfitters, and prior to going into business for himself some six months ago, he was connected with the L. H. Prentice Co. of Chicago. He was an esteemed member of the Chicago Master Steamfitters' Association, and had a wide circle of friends in the trade. The funeral was held from his late home, 930 Windsor Avenue, Tuesday, September 22, many of his friends in and out of the trade attending.

Albany, Ore.—The plumbing store and shop of M. Ludwig were destroyed by fire recently.



# Among the Wholesalers and Manufacturers



## WILL DEAL IN PLUMBING SUPPLIES.

The G. H. Turner Co. is the title of a new jobbing concern at 1052 North Alameda Street, Los Angeles, Cal. Geo. H. Turner, the manager, has been for the past six years with the Anderson & Lore Co.

## FEDERAL-HUBER CO. RE-OPENS NEW YORK OFFICE.

The Federal-Huber Co., of Chicago, has recently reopened its eastern branch office at 33 W. 44th Street, New York City. W. E. Hinsdale, former salesman for the concern, has been assigned to manage the office. Mr Hinsdale is one of the principals of the Hinsdale-Meyer Co., jobbers in plumbing supplies, New York City, who are now disposing of their assets and preparing to retire from business. The Federal-Huber Co. has taken over the concern's office and its sales force.

## THE FALL MEETING OF THE NATIONAL ASSOCIATION OF BRASS MANUFACTURERS.

The National Association of Brass Manufacturers held its fall meeting at the Hollenden Hotel, Cleveland, O., September 14th to 18th, during which time the delegates in attendance approved of the work of the List Committee as far as it has gone, appointed a committee to cooperate with the Supply Associations with a view to standardizing of ball and cock threads and threads incident thereto and listened to very interesting reports on freight matters, labor conditions and the business situation as affecting the interests of members in the different sections of the country. The next meeting of the Association will be held in New York City on December 9th and 10th.

## THE D. T. WILLIAMS VALVE CO. HAS NEW PRESIDENT.

The D. T. Williams Valve Co., manufacturers of steam traps and valves, etc., in Cincinnati, O., has been practically reorganized, by the election of Robert E. Mullane, who has been for some years treasurer of the concern, as president, succeeding D. T. Williams, who retires from the company. Francis X. Pund becomes vice-president of the company. Mr. Mullane's position as treasurer will not be filled immediately. Plans for a somewhat extensive enlargement of the company's plant on Spring Grove Avenue have been tentatively completed, but will not be taken up before the spring of 1915. The company will retain its former name, under which it has built up a considerable business; and Mr. Mullane expresses himself as being extremely confident of a further expansion of business, with the larger opportunities to American manufacturers offered by the South American and Asiatic fields by the present situation.

## PIERCE, BUTLER & PIERCE MFG. CORPORATION AND KELLOGG-MACKAY CO. COMPLETE REORGANIZATION.

The Pierce, Butler & Pierce Manufacturing Corporation, of Syracuse, N. Y., filed a charter of incorporation at Albany, N. Y., on Wednesday, September 23rd, to engage in the manufacturing and jobbing of plumbing and heating supplies, with branches at Worcester, Mass., and Boston, Mass., New York City and Philadelphia. The new corporation has issued stock to the amount of $1,650,000, of which $700,000 is first preferred, $150,000 second preferred and $800,000 common. The officers of this corporation are: President, J. T. Duryea; first vice-president, C. V. Kellogg; second vice-president, P. M. Beecher; treasurer, J. T. Woodward; assistant treasurer, A. N. Theobald; secretary, C. F. Bennett; assistant secretary, W. M. Butler. Directors: Theodore Ahrens, Richard Garlick, M. J. Alexander, Acosta Nichols, Ralph S. Bowen, C. V. Kellogg and J. T. Duryea. The sale of the plant and business of the old Pierce, Butler & Pierce Mfg. Co. was held at Syracuse, N. Y., on Tuesday, September 22nd, the day before the incorporation took place.

The Kellogg-Mackay Co., of Chicago, filed its charter in Springfield, Ill., on Wednesday, September 30th. This corporation is capitalized at $900,000, $500,000 of which is preferred and $400,000 common. The main office of this company will be in Chicago and it will have a branch in Minneapolis. The officers of this company are: President, C. V. Kellogg; vice-president, J. T. Duryea; second vice-president, W. T. Woodruff; treasurer, J. T. Woodward; assistant treasurer, F. W. Fix; secretary, E. W. Payne. Directors: Theodore Ahrens, Richard Garlick, M. J. Alexander, C. V. Kellogg and J. T. Duryea. The business and plant of the old Kellogg-Mackay Co. was sold in Chicago on Monday, September 28th.

The control of the two new corporations will be vested in C. V. Kellogg, of Chicago, and J. T. Duryea, of New York. Mr. Kellogg states that the new concerns will adhere to the same trade policies as their predecessors.

## JAMES F. CONRAN WINS PROMOTION.

James F. Conran has been appointed to the position of general sales manager of the Standard Sanitary Mfg. Co., of Pittsburgh, Pa. The appointment went into effect last week, and he is now established with office in the Bessemer Building, in Pittsburgh. Mr. Conran is one of the oldest "Standard" salesmen and has been for many years manager of the company's New York business, at the same time taking a very keen interest in its offices at Boston, Philadelphia and Washington, so that his promotion is well-deserved, and his many friends in the trade will be glad to hear this good news.

## COMPANIES RECENTLY INCORPORATED.

The Holyoke Appliance Co., Ratcliffe Bldg., Holyoke, Mass., has been incorporated with a capital stock of $95,000, and will soon begin to manufacture heating specialties. The incorporators are: Charles S. Higginbotham, of Holyoke; James W. Driscoll, Moses Pallot and John Beck, all of Springfield, Mass.

The Fiske Corporation, of Natick, Mass., has been incorporated with a capital of $20,000, to manufacture plumbing specialties. The officers of the company are: Norman J. McGaffin, of Boston, and D. A. Baldwin, of Natick.

The Elway-Chamberlain Co., of Altoona, Pa., has been incorporated with a capital of $25,000, to manufacture steam specialties. The incorporators are: J. E. Elway, James Chamberlain and M. B. Braizon.

The F. A. Herrick Co., of Toledo, O., has been incorporated to manufacture plumbing specialties. F. A. Herrick is at the head of the new company.

The Vapo-Gas Burner Co., of Columbus, O., has been incorporated with a capital of $5,000, to manufacture burners for heating boilers. The incorporators are: M. F. Loofborrow, Dalton I. Hoch, E. D. Munyan and M. K. White.

## FALL TOURNAMENT OF THE CENTRAL TRADE GOLF ASSOCIATION.

The Central Trade Golf Association, of Pittsburgh, Pa., held its regular fall tournament on the links of the Greensburg Country Club, at Greensburg, Pa., on Tuesday, September 22nd, with a good attendance and under ideal weather conditions, making the event a pleasant success in every respect. The official report of the day's achievements follows herewith:

Class A, First Flight, Elimination Round: J. K. Frye beat G. H. Bailey, 1 up. C. D. Winger beat W. A. Sprenkle, 1 up. A. Kugemann beat W. F. Hart, 5 and 3. A. McGonagle beat F. H. Hecht, 2 up.—Semi Finals: C. D. Winger beat J. K. Frye, 2 up. A. Kugemann beat A. McGonagle, 2 up.— Final Round: C. D. Winger beat A. Kugemann, 5 and 4.

Class A, Second Flight, Elimination Round: J. N. Anderson, jr., beat J. Graham, 3 and 2. J. C. Simms beat J. A. Weldon, 2 and 1. T. C. Tipper beat A. E. Hummel, 2 up. C. K. Brown beat T. R. Kenney, 1 up.—Semi Final: J. N. Anderson, jr., beat J. C. Simms, 3 up. T. C. Tipper beat C. K. Brown, 1 up.—Final Round: J. N. Anderson, jr., beat T. C. Tipper, 3 and 1.

Class A, Third Flight, Elimination Round: W. A. Myler beat J. P. Piper, 1 up in 10 holes. E. H. Eggleston, jr., beat T. L. Kirk, 2 up. H. J. Peterson drew a Bye. A. M. Saunders drew a Bye.—Semi Final: E. H. Eggleston, jr., beat T. L. Kirk, 2 up. H. T. Peterson drew a Bye. M. Saunders, 2 up.—Final Round: H. T. Peterson beat E. H. Eggleston, jr., 2 up.

Class A, First Flight, Beaten Fours, Semi Final: W. F. Hart beat F. H. Hecht, 5 and 3. W. A. Sprenkle beat G. H. Bailey, 4 and 3.—Final Round: W. F. Hart beat W. A. Sprenkle, 4 and 3.

Class A, Second Flight, Beaten Fours. Semi Final: J. Graham beat J. A. Weldon, 3 and 2. A. E. Hummel beat T. R. Kenney, 1 up.—Final Round: J. Graham beat A. E. Hummel, 1 up.

Class A, Third Flight, Beaten Fours, Semi Final: J. P. Piper drew a Bye; T. L. Kirk drew a Bye.—Final Round: J. P. Piper beat T. L. Kirk, 3 and 2.

Class B. First Flight, Elimination Round: J. H. Lamberger beat E. M. Decker, 1 up. J. H. McKee beat E. E. Brosius, 2 and 1. J. D. Root beat S. H. Harper, 3 and 3. F. A. Haring beat C. B. Kennedy 3 and 3.—Semi Final: J. W. McKee beat J. H. Lamberger, 2 up. F. A. Haring beat J. D. Root, 2 up.—Final Round: J. H. McKee beat F. A. Haring, 2 up.

Class B, Second Flight, Elimination Round: W. B. Bryar beat H. J. Harte, 4 and 3. T. F. Vickers beat J. G. Steitz, 2 up. R. P. Keeney beat W. L. Walton, 1 up. W. W. Hall beat A. H. Bowman, 2 up.—Semi Final: W. B. Bryar beat T. F. Vickers, 4 and 2. W. W. Hall beat R. P. Keeney, 2 and 1.—Final Round: W. W. Hall beat W. B. Bryar, 4 and 2.

Class B, First Flight, Beaten Fours, Semi Final: E. E. Brosius beat E. M. Decker, 4 and 3. S. H. Harper won by default.—Final Round: E. E. Brosius beat S. H. Harper, 5 and 4.

Class B, Second Flight, Beaten Fours, Semi Final: H. J. Harte beat J. G. Steitz, 1 up. W. L. Walton beat J. H. Bowman, 4 and 3.—Final Round: W. L. Walton beat H. J. Harte, 5 and 4.

The prize-winners and their prizes were as follows:

J. N. Anderson, jr., silver and glass pitcher, presented by Standard Mfg. Co.

W. W. Hall, gold watch, presented by Central Tube Co.

J. W. McKee, desk clock, presented by T. L. Kirk.

H. T. Peterson, golf bag, presented by J. A. Weldon.

John Graham, one dozen golf balls, presented by J. C. Simms.

C. D. Winger, golf bag, presented by the association.

W. F. Hart, E. E. Brosius, W. L. Walton, and J. P. Piper, each received one dozen golf balls, all presented by the association.

## LEHNERT & CO. HOLD OUTING.

The annual outing of the employes of Lehnert & Co., of New York City, manufacturers of brass specialties, was held on Saturday, September 26.

The party journeyed from the company's plant at 313 West Seventy-second Street to Grant City, Staten Island, where in the pretty surroundings of Midland Park an enjoyable day was spent.

Everyone entered into the holiday spirit and enjoyed to the full the field games, and special dinner which was provided by the committee, which was composed of B. Hammer, Sam Millman and George Ellis.

The judges who presided over the athletic events were Vic. Cucci, of George Gibson & Co., and W. James, of J. L. Mott Iron Works. The 100-yard dash (closed) was won by Alphonse Verglian, who also took the prize in the 16-pound shot put contest. D. Farfuro took the 100 yard dash (open). The running broad jump went to F. Whittle.

Baseball came in for its share of attention also. The teams made up from among those present battled through thirteen warm innings for supremacy.

The line-ups were:

First team—Haniman, c; Palmer, p; DaPuy, 1b; Farfuro, 2b; Enders, 3b; Roeser, lf; Greene, rf; Boyle, cf; Browning, ss.

Second team—Bowers, p; Wilbus, c; Millman, 1b; Hummer, 2b; Pabst, 3b; F. Whittle, lf; W. Whittle, rf; Ellis, cf; Walters, ss.

Ed Jung was umpire. The game resulted in a score of 3 to 1 in favor of the second team.

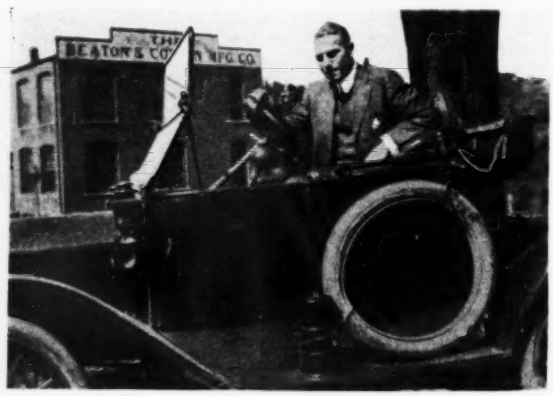
Among the guests of the company were Mr. Charles, of I. J. Barth & Co., and Carl Lund, of the Carlund Mfg. Co.

# Personal Mention

Henry W. Letcher, of 50 Church Street, New York City, has been appointed general sales agent in the East for the Penn Enamel Sink Co., of Indiana, Pa. Robert B. Shoe will assist him in marketing this company's products.

Harry Snow, of Chicago, field marshal for the Peerless Selling Co., of Evansville, Ind., was discovered reconnoitering through Michigan last week. It was very evident that Harry was planning a campaign for orders and when Snow storms the field for business it is usually surrendered to him.

Charles Bodley, the well-known representative of the Beaton & Corbin Mfg. Co., Southington, Conn., is shown in the accompanying picture, which was taken last week



Charles Bodley of the Beaton & Corbin Mfg. Co.

in front of the company's office, just as he was about to start for Boston in his Ford. Mr. Bodley, ten days ago, returned from a trip through the West and reports a good demand for floor and ceiling plates.

## "SEND SALESMEN," ADVISES SOUTH AMERICAN CONSUL.

In talking about the opportunities for increased commercial relations with South America, Dr. Garcia Leão, the Brazilian Vice-Consul in New York City, said: "Send your salesmen down to see us. We want your goods because there is no country in the world which is held in higher esteem than the United States."

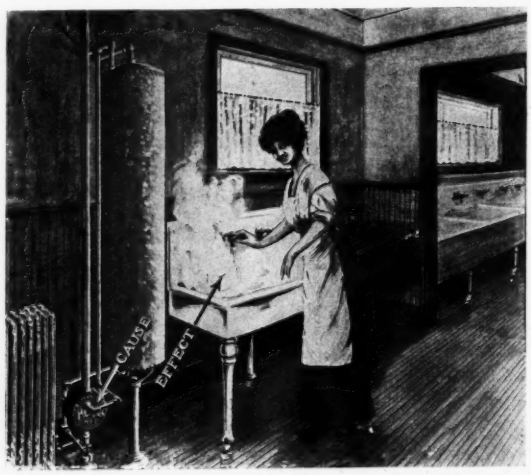
Dr. Leão said so far as his country is concerned the opportunity for extended commercial relations is great.

"To be sure, Brazil has been passing through a crisis because of the war," said the Doctor, "but so has every other country, and we have weathered the storm safely.

"You have heard a lot of talk about South American credit," he continued, "but credit is simply confidence. My advice to the American manufacturer is to first send his agents there to find out what the people want, and then sell for cash. As he increases his business he will get in closer touch with the people, and then he will be in a position to give credit, because he will know those of his customers in whom he has confidence."

## THE MEYERS STEAM WATER HEATERS.

The Meyers Steam Water Heater, which is said to be a new application of steam water heating, has recently been placed upon the market for the use of those engaged in installing modern heating appliances. The company which manufactures this device claims that it is simple in operation and easy to install, and that it works automatically and is made in solid castings which eliminates all leaky joints. The heaters are made in six sizes and also up to any capacity desired. This device, it is explained, is placed in the steam main or riser, and connected with the hot water tank in the kitchen or basement, or any other part




The Meyers Steam Water Heater Is Attached at the Radiator, and Keeps the Water in the Range Boiler Hot.

of the building and will furnish a continuous supply of hot water. The No. 1, shown in operation in the accompanying illustration, will furnish 18 gallons of hot water per hour. The company contends that the larger sizes of the Meyers Steam Water Heater when used in apartment buildings, will take the place of the large tank in the basement and that this permits each tenant to have his own water supply independent of other tenants at the rate of sixty gallons per hour. This heater is also designed for the purpose of supplying heat for bath-rooms and kitchen of private dwellings or apartment buildings, and at the same time furnish hot water for bath and kitchen fixtures. Further particulars can be obtained from the Meyers Manufacturing Co., Lancaster, Pa., upon request, mentioning "Domestic Engineering."

## NOTABLE VOLUME ON FURNACE HEATING.

A notable work entitled "Progressive Furnace Heating," by Alfred G. King, well known to the trade, has recently been issued. Bound in cloth and containing 280 pages elaborately illustrated, the book comprises a practical manual of designing, estimating and installing modern systems for heating and ventilating buildings with warm air. The book is supplemented by a complete treatise, by William Neubecker, on the construction and patterns of furnace fittings. This supplement contains points of valuable information and is worthy of careful reading and serious attention. "Progressive Furnace Heating" may be obtained from "Domestic Engineering," 445 Plymouth Court, Chicago, Ill., and will be sent prepaid on receipt of the price, $2.00.

## UNION SANITARY MFG. CO'S. NEW CATALOG.

An attractive and well illustrated catalog, measuring 12x9 inches, has recently been placed before the trade by the Union Sanitary Mfg. Co., of Noblesville, Ind. The catalog contains 94 pages, printed on glazed paper, with the front cover printed in blue, red and silver. A full line of bath-tubs, lavatories, closet bowls, sinks and other specialties is shown. Upon request roughing-in measurements or dimensions of any fixture shown in the catalog will be gladly furnished. Those in the trade desiring a copy of this catalog may obtain same by addressing the above named company, mentioning "Domestic Engineering."

## NEW BOOK ON VENTILATION AND HUMIDITY.

An instructive and interesting book on the subject of "Ventilation and Humidity in Textile Mills and Factories," is one of the notable technical works of the present year. The author, Cecil H. Lander, of the Engineering Department, University of Manchester, England, is an authority of international repute on this topic which he has discussed in a thorough and masterly manner. Mr. Lander states in his preface that during the past few years attention has been directed to the conditions prevailing in textile mills and factories, where, owing to the requirements of manufacture, high temperature and large percentage humidities co-exist. He further states that the importance of the subject to all interested in the textile trades made it desirable that an account of the general questions of ventilation and humidification, considered mainly for the purpose of abating the high temperature, should be available, and it is with such an object in view that the author submits his work to his readers. The book is bound in cloth, contains 175 pages, is illustrated, and costs $1.40, postpaid. It can be obtained from "Domestic Engineering," 445 Plymouth Court, Chicago, Ill., on receipt of the price stated.

### The Pig Iron Market.

The pig iron market remains unchanged. Selling agencies are transacting business in a somewhat routine manner, sales for the most part consisting of two to five hundred ton lots, and then only in urgent cases. Reports indicate no inquiries pending for any tonnage of size, and the situation resumes itself into one of watching and waiting. The opinion obtains that little change may be expected until the existing differences abroad have been settled, and a feeling of confidence once more restored. Southern pig iron furnaces are endeavoring to hold to a $10.25 Birmingham quotation with somewhat indifferent results, as it is said to be possible to secure standard foundry at $10 Birmingham, for nearby delivery. Northern Ohio irons are still quotable at $13 Ironton basis, with sales small. It is reported that several machine tool builders in Cincinnati have been fortunate enough in securing orders for a fair complement of tools from the foreign powers, that will no doubt stimulate the melt and cause additional activity among foundries. Foundry iron is quoted as follows:

| | |
|---|---|
| No. 1 Northern Foundry, New York | $14.70 to $14.95 |
| No. 2X Northern Foundry, New York | 14.00 to 14.50 |
| No. 2 Southern Foundry Birmingham | 10.00 to 10.25 |
| No. 2 Southern Foundry, Cincinnati | 13.25 to 13.50 |
| No. 2 Northern Foundry, Chicago | 13.00 to 13.50 |

### The Copper Market.

There is not very much activity in the copper market. Some sales of electrolytic have been made at 11¾ cents, and quantities are offered at this price.

### Tin.

American deliveries of tin during September, according to the New York Metal Exchange, were 3,600 tons as against 2,900 tons last month and 3,100 tons in September, 1913. The total American deliveries for the nine months just ended were 33,500 tons, whereas in the same period last year they were 34,200 tons and 37300 tons in 1912. The stock of tin, store and landing is 1,603 tons on September 30th, an increase of 526 tons during the month. Late Tuesday afternoon the market became quite active at $31.00 and $31.50. Nearly all the foreign limits were taken and bids for further quantities were cabled to London and the East. Dealers sold considerable spot tin and at the close of the market there were more buyers than sellers.

### Lead.

Lead is quoted at $3.75 in New York and at $3.67½ in St. Louis, but few sales have been transacted.

### Spelter.

There has been no new inquiry for spelter from England following the report that the English government would probably buy 100,000 tons of galvanized sheets, and there has been no acceptance of offers at 5.12½ to 5.15 New York which were cabled to England earlier in the week.

### Old Metals.

New York dealers' buying prices are all nominal as follows:

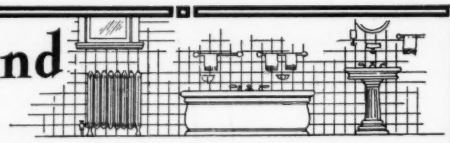
| | |
|---|---|
| Strictly crucible copper | $10.00 to $10.50 |
| Light copper | 8.50 to 8.75 |
| Uncrucibled copper wire | 9.25 to 9.50 |
| Uncrucibled heavy copper | 9.00 to 9.50 |
| No. 1 machine composition | 9.00 to 9.25 |
| Heavy brass | 7.00 to 7.25 |
| No. 1 brass turnings | 6.50 to 7.00 |
| No. 1 composition trunings | 8.25 to 8.50 |
| New brass clippings | 7.50 to 8.00 |
| Cocks and faucets | 7.75 to 8.00 |
| Light brass | 5.75 to 6.00 |
| Heavy lead | 3.30 to 3.35 |
| Tea lead | 2.75 to 3.00 |

Van Name & Co., who formerly conducted a general contracting business at 80 Wall Street, New York City, have removed to Huntington, Long Island, where they have added to their business plumbing, heating and metal work departments.

James Mullins, a plumbing contractor at Springvale, Me., is erecting a new building for his own use on a lot on Butler Street which he recently purchased. The new structure will give Mr. Mullins much more room and better facilities for caring for the wants of his customers.

**Have You Looked Carefully Over the Classified Advertisements in This Issue? It Will Pay You.**

# Among the Plumbing and Heating Contractors



## Illinois

### Chicago and Vicinity.

Miss Emma Pischel, a sanitary inspector of the bureau of health, Chicago, returned recently from abroad. She was in Germany at the time war was declared, and witnessed the rapid mobilization of the Kaiser's army. She expressed surprise at the wonderful unity of the German people. Contrary to the usual reports, Miss Pischel experienced no difficulty in traveling through either Germany or the other countries after war was declared. She was not mistaken for a spy anywhere along the route, she asserts.

The Automobile stolen from Chas. A. Dreier, president of the Chicago Master Plumbers' Association, over a month ago, has up-to-date remained undiscovered. It is said that over three hundred machines have been stolen in Chicago since the first of January. It appears that a well-organized gang of automobile thieves have been operating in a bold manner in the city during the year, and in most cases successfully eluding the police.

According to statistics emanating from the building department at the city hall, Chicago, more homes of all classes are in contemplation in the city at the present time, than ever before. It is interesting to note in studying these figures that on the North Side of the city, a number of new houses of an exceedingly costly character will be erected to say nothing of the many beautiful places to be erected on the North Shore. The number of two-story flat buildings and small dwellings in all parts of the outlying sections which are now being planned is tremendously large and the number promises to increase. In view of this it might be interesting to get the correct answer to the question: "Who said industrial depression?"

Harry Peckham, 209 Milwaukee Avenue, has recently been awarded the contract for installing the heating systems in a factory to be erected at Jackson and Jefferson Streets.

The plumbing contract for a twelve-flat building, to be constructed at 3314-22 Eastwood Avenue has been awarded to Marcus Weil, of 3744 West Chicago Avenue.

Frank P. Schuster, of 751 North Clark Street, will install the plumbing fixtures in a flat building to be erected at 4501 North Spaulding Avenue.

F. J. Bohn, 4368 Lincoln Avenue, has recently been awarded the contract for plumbing installation in a modern residence to be built at 1918 Foster Avenue. The heating contract went to M. S. Opsahl, of 1701 Carmen Avenue.

Figures were taken recently on plumbing work for the new buildings to be erected by the South Shore Country Club, Chicago, Ill. The new home of the club will be built on the grounds occupied by the present buildings. The plumbing and other sanitary equipments will cost in the neighborhood of $25,000.

Edward C. Oakes, of 3418 Fullerton Avenue, Chicago, has incorporated his plumbing and gasfitting business with a capital stock of $2,500.

## Michigan

### Detroit and Vicinity

E. H. Leonard, 422 Michigan Avenue, has the plumbing and heating contract for the one-story addition being built to Grace Hospital.

Harrigan & Reid Co., 70 State Street, have been awarded the plumbing and gas fitting contract on the ten-story building being erected at Michigan and Wayne Streets by David Scott. The building will be occupied by a large furniture concern.

Probably no firm in Detroit has expanded more rapidly or gone along more buoyantly with the flood tide of the city's progress than the D. Karle Co., who specialize in plumbing, heating, soda fountains, etc. Mr. Karle started the business 25 years ago in a small shop. Later larger quarters were engaged at 448 Gratiot Avenue and within the past year the company has moved to a building especially built for it at 223 Monroe Avenue. Much of the success of the company is due to Edward H. Reichie, now president, who became secretary about ten years ago. About a year ago Mr. Reichie bought Mr. Karle's interest and organized a new company, with himself president; J. J. Miller, vice-president and R. H. Wheeler, secretary. Each branch of the business is in charge of an expert who gives all his time to his department.

A recent investigation made by the First and Old Detroit National bank revealed the fact that Detroit was in good shape financially, that about the same number of men were being employed as a year ago, and that the future was very bright. It is a fact that Detroit today is enjoying greater prosperity than most of her neighbors. True, the plumbing business has not been just what it might have been the past summer, yet everybody had a fair business and is optimistic about the future.

Donald Miller Co., 280 Brush Street, has been working on the plumbing of the four-story brick building on Wayne Street, near Michigan Avenue, which has been remodeled.

The plumbing in the H. R. Leonard Furniture building, being erected on Woodward Avenue will be installed by the George H. Soffel & Co., whose establishment is located at 323 East Jefferson Avenue.

White & Fisher, 226 Third Avenue, have been awarded the contract for the plumbing installation in the new addition to the Cross Laundry building.

Harrigan & Reid, of 70 State Street, will install both the plumbing and heating in the two-story brick store and flat building for Albert Lutticke at Woodward and Mt. Vernon Avenues. The same firm have the plumbing and heating contracts for a six-family apartment building being erected in the same block by Mr. Lutticke.

Victor D'Hondt, of 332 Rivard Street, has the plumbing contract for the new garage being erected at Jefferson and Townsend Avenues.

R. E. Schultz, of the Murray W. Sales Co., has recovered from an attack of ptomaine poisoning which he contracted while spending his vacation in the west.

# Kentucky

### Louisville and Vicinity.

Business with the Louisville plumbers is seasonably quiet just now. Most of the plumbers are fairly busy, but no new contracts are in sight which call for more than a moderate outlay. The summer has been a good one, however, and the trade as a whole is fairly well satisfied.

Permits for plumbing work estimated to cost $537,000 were issued during the fiscal year 1914, which ended July 31 in Louisville, according to a report recently filed by Plumbing Inspector McGrath with the Board of Public Safety. The amount is $35,000 in excess of the 1913 record. Six hundred more permits were issued, and Mr. McGrath states the increase was due largely to the many new sewers that have been constructed.

The local plumbers are greatly interested in the recent announcement of Bert Hicks, the new manager of the Galt House, one of Louisville's oldest hotels, that between twenty-five and thirty new baths, and half as many showers, would be installed in the rooms shortly. The bids will be let about October 10, according to Mr. Hicks, and the improvements will cost in the neighborhood of $100,000.

The Louisville Master Plumbers' Association held a meeting on September 14. The new plumbing law and the new regulations of the Louisville Gas and Electric Company were the main topics of the evening. Resolutions were provided for on the death of Walter Richards, a plumber of Newport, Ky., who was recently drowned in the Kentucky river. A special committeee of which W. H. Matlock is chairman, was appointed to draft the resolutions.

Joseph Vogel, of the firm of P. A. Vogel & Sons, jobbers of plumbers' supplies, who has been ill for several months, is reported considerably worse and his recovery is doubtful, according to one of the members of the firm.

George W. Schardein, manager of F. S. Schardein & Sons, attended the funeral of D. E. Rowley, in Indianapolis. Mr. Rowley traveled for The H. Mueller Manufacturing Co., of Decatur, Ill., manufacturers of brass goods. Business with the Schardein concern has been remarkably active lately. Two large contracts were recently awarded the firm, the heating and ventilating in the Hill Street and Cypress Street schools.

The Sunlite Gas Co., Louisville, recently filed articles of incorporation, in which the capital stock of the concern was listed at $1,200. The incorporators are: Orion K. Stuart and Clarence A. Tucker, of Indianapolis, Ind., and Thomas E. Hacket and Margaret I. Moran, of Louisville.

About twenty ordinances authorizing the Board of Public Works to make gas, water and sewer service connections in nearly fifty blocks, are being considered by the Gas and Water Committee, of the Board of Councilmen. These were the first ordinances asked by the Board of Public Works under the recently enacted measure giving it authority to compel installation of service connections on streets or blocks about to be constructed or reconstructed. The measure gives the board authority even to make connections into vacant lots. The idea is to keep the streets from being torn up after they are laid.

Bids will be received until Oct. 5 by the County Judge of Harrison County, Ky., at Cynthiana, Ky., for the heating plants to be installed in the court house and two additional wings which are to be built at once. The cost of all improvements is estimated at $15,000.

# Pennsylvania

### Pittsburgh and Vicinity.

The plumbing contract for the new store and loft building, to be erected in Pittsburgh by the Fidelity Title & Trust Co., has been awarded to McFadden & Craig Co., 235 Fourth Avenue. The heating work for the same building was secured by the Iron City Heating Co.

The Shively Plumbing Co. will do the plumbing in the new building going up in the East Liberty district for the East Liberty Wholesale Grocery Co.

Mrs. Anna Lyst, who is erecting a number of residences in Wilkinsburg, has awarded the heating contract in this improvement to George B. Stewart, of Pittsburgh.

The contract for the heating system that is to be installed in the new Gazette-Times Building, now going up here, has been awarded to the McGinniss-Smith Co.

The contract for installing the ventilating system in the new Rosenbaum Department store has been secured by the Baker-Smith Co., of Pittsburgh.

The Reliance Heating Co. is installing hot water heating systems in the duplex houses and apartment buildings in Carrick Borough for E. J. Bonner, also in the new apartment building for M. T. Mooney, Knoxville and the new apartment building for J. M. Hallerbach, Carrick. They have just completed the installation of hot water heating system in the thirty-one new houses for C. B. Watkins in Squirrel Hill, and have the contract for the hot water heating system in a $15,000 residence in Bridgeville.

The Pittsburgh Heating Co. has received the contract for three fan houses at Mine No. 1, of the Pittsburgh Coal Co.

The Iron City Heating Co. received the contract for the heating to be installed in the freight station and office building at Pittsburgh for the Pennsylvania Railroad Co.

### Philadelphia and Vicinity.

H. O. Lutz & Co., S. 16th Street, have been awarded the contract for extensive alterations to the plumbing system in the fraternity house at 38th and Spruce Streets.

J. J. Mulhern, 3524 Haverford Avenue, has been awarded the contract to install new plumbing and heating in the apartment house at 3811 Haverford Avenue. Consideration, $2,500.

P. J. Hoft, 243 S. 8th Street, reports quite a number of heating contracts for the coming fall season, and also a number of plumbing alterations to complete.

Hoben & Doyle, 21st and Pine Streets, have been awarded the heating contract for Dr. Ziegler's residence in Haverford, Pa.

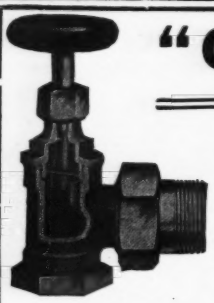
E. P. Robertson, 3456 Amber Street, has been awarded the contract to install new fixtures in the property at 10th and Norris Streets.

J. J. Fineran, Conshohocken, has been awarded the contract for the new High school here.

F. J. Boyer Plumbing Co., of Norristown, has been awarded the contract for 12 new houses which are being erected here.

H. W. Meier, 4th and Green Streets, has been awarded the contract to install new heating and plumbing in the building which is being constructed for A. Jacobi at the corner of 4th and Green Streets.

J. C. Brown, Olney, Pa., has been awarded the plumbing and heating contract for seven new houses to be erected in Willow Grove, Pa.



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HIGH GRADE

Radiator Valves

All Valves thoroughly tested and inspected before shipment.

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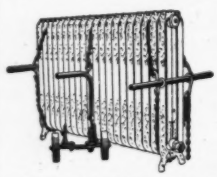
Capitol Brass Works

DETROIT, MICH.

TO DO MORE WORK IN LESS TIME



is the great problem of modern business.

The steamfitter who is a keen business man will readily see the advantage and practicability of

BUELL'S COMBINED CARRIER AND TRUCK

Saves labor, time and strength. Just the thing for carrying radiators up and down crooked narrow stairways and halls.

*Write for details and prices.*

BUELL BROTHERS, Fulton, N. Y.

Ready for Instant Use

The time lost on each job in fitting up an old-fashioned vise bench will more than pay for a

Portable Vise Bench

Besides, this bench can be folded and carried to the job by any boy—saving express charges—and can be set in position and fastened to floor in a few minutes.

Built to last forever.

Order one and you will never use any other kind.

Standard Iron Works

540-50 W. 58th Street

New York City

No Grease-Clogged Pipes where the

Boston Grease Trap

is used.

Catches all grease from kitchen sinks and prevents it from going into waste pipes.

Easily installed—easily cleaned—simply constructed and reasonable in price.

Write for full details.

R. Estabrook's Sons

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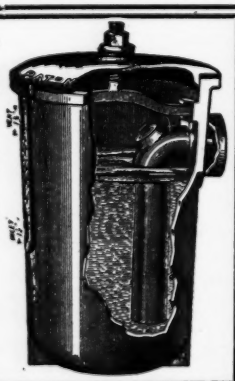



# Massachusetts

The contract for plumbing in the new Kennedy block at Pittsfield has been given to Noble, Milne & Co., of that city. The heating contract has not yet been let.

Silver's Plumbing and Electric Supply Co., Salem, is located in new quarters at 44 Lafayette Street in that city. The firm was formerly at 24 Central Street.

The Cleghorn Co., of Boston, has the contract for power, heating and ventilating in a new twelve-story office building being erected at 56 to 70 Devonshire Street, Boston.

The foundation is being built for a new armory building to be erected on Commonwealth Avenue, Allston, for the state of Massachusetts. R. D. Kimball Co., 6 Beacon Street, Boston, will install the heating apparatus.

The E. H. Friedrich Co., of Holyoke, was awarded the contract for heating, metal work and roofing, and the Holyoke Valve & Hydrant Co., the contract for plumbing the new hotel building being erected for the Holyoke Hotel Co. The steel work is now above the third floor.

Bids for plumbing, heating and ventilation for the proposed new Tucker Street schoolhouse at Fall River have been received, and it is expected that the contracts will soon be awarded. William Kennedy's bid of $2,846 was the lowest for the plumbing, and Frank J. Harrington, who offered to do the heating and ventilation for $5,566, was the lowest bidder for that contract.

Edward Radding, of Springfield, is working on a new business and apartment block which he is building for himself at the corner of Bay and Sherman Streets. The building will be four stories high and arranged for two stores and fourteen modern apartments. The plumbing, metal work and roofing will be done by the Radding Co., 55 Sharon Street. The same concern has the contract for similar work in a new building to be erected at the corner of Liberty and Main Streets for the Liberty Realty Trust.

Plumbing business continues brisk at Worcester. Contracts recently awarded in that city include the following: Thomas J. McManus, tenement house on Hitchcock Road for L. LeBieuf, tenement house on Grafton Street for James Mulhern, tenement house on Guild Hill Road for Joseph Roberts, and tenements and stores on Lamartine Road for A. Gaudette; J. C. Luby & Co., store on DeMarco Terrace for A. Ferrarri, tenement house on Blaisdell Street for W. Trottier; Rogers Bros., apartments on Caroline Street for J. Murphy; C. A. Middlemas, apartments on Burncoat Street for C. G. Stevens; M. J. Maher & Co., stores and factory in Shrewsbury for New England Fibre Blanket Co.

# District of Columbia

The National Hotel, one of the oldest and largest hostelries in Washington, D. C., is trying to get abreast of the times and in doing so is adding a number of bath rooms and lavatories, with running hot and cold water, in every room. This nice little contract fell into the hands of Louis Conradis, of that city.

Plans will shortly be issued by the District of Columbia government and bids will be taken on the plumbing equipment of a new colored high school about to be built. It is expected that the plumbing equipment will exceed $25,000 and the installation will be a model of its kind.

# California

**San Francisco and Vicinity.**

Jobbers and manufacturers' representatives along the Pacific Coast are waking up to the fact that the Panama-Pacific Exposition now offers great opportunities to American manufacturers of sanitary goods and also that the situation in Europe and the Panama Canal has added materially to the advantages that may be secured. The South American and Asiatic countries are making big displays at the Exposition, and a large number of people from the better classes is certain to be in attendance. Not only are there large undeveloped fields in these countries, but there are importing houses in South America and eastern Asia who formerly traded with Europe and are now on the lookout for connections in this country—particularly since the Canal places American shippers at an advantage as to freights.

The first shipments of pipe and galvanized sheets have arrived via the Panama Canal in good condition, though it is admitted that the all-water route is still something of an experiment. One large jobber is still getting in his stock by rail.

The Robert Dalzier, jr., Co., reports a considerable amount of small work and a few good sized jobs. This company captured the steam heating and plumbing for the new First Congregational Church, at Mason and Post Streets, at an approximate cost of $5,000.

The contract for the steam heating and oil burning plant in the fifteen-story J. Sockolov Hotel building, on Powell Street, has been awarded to the Petersen-James Co. for $4,340.

O. Moncur, a well-known plumber of Yuba City, Cal., is visiting in San Francisco this week. He reports that the outlook in the Sacramento valley is for increased activity this fall.

The hot water heating plant in the big Horticultural building on the Panama-Pacific Exposition grounds will be installed by the Turner Co. at a cost of $2,662.

One of the largest heating and ventilating contracts awarded this month was for the new passenger depot to be erected by the Southern Pacific Railroad Co. on the block bounded by Third, Fourth, King and Townsend Streets. The work will be done by E. V. Lacey at a cost of $6,885. The preliminary work on the depot is well under way.

The heating system in the new Fireman's Fund Insurance building, at the corner of California and Sansome Streets, will be installed by The Scott Co. at a cost of $1,630. The building will soon be ready for the heating system.

F. A. Heilbron, one of the prominent men in the San Diego trade, is visiting in San Francisco this week. He reports that his fellow citizens are showing considerable interest in the San Diego Exposition.

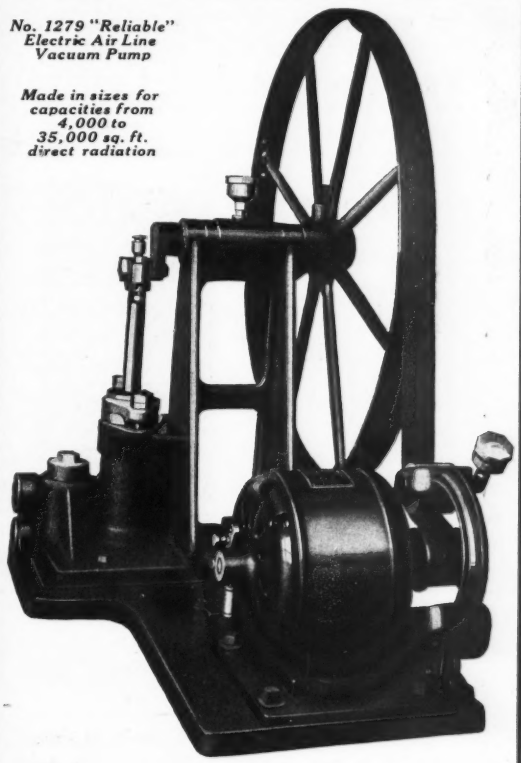
The Potrero Gas Works is being improved by the addition of a new concrete pump house.

J. L. Stulsaft, of the Morris Stulsaft Co., is in the east, calling on eastern manufacturers, and is not expected home before the end of October. The company has been kept busy during the summer and conditions indicate that they will have a very busy fall and winter season.

Willard Chamberlain, San Francisco representative of the Standard Sanitary Manufacturing Co., just returned from a business tour of the Pacific Northwest.


*No. 1279 "Reliable" Electric Air Line Vacuum Pump*

*Made in sizes for capacities from 4,000 to 35,000 sq. ft. direct radiation*



**25 to 50 per cent. saving in fuel**

—quick, even heat distribution, in zero or mild weather, without tinkering or adjusting, is assured by installing a

**"RELIABLE" ELECTRIC VACUUM PUMP**

The cost for operating is very low—only one-third to one-fifth that of other vacuum pumps. These results have been secured in thousands of buildings of all kinds and sizes —many of the largest and finest in America.

**"Reliable" Vacuum Heating Systems insure 100 per cent. *Efficient Heating* at *Minimum Cost*—that's what *you* and *your customers* want!**

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**The Bishop-Babcock-Becker Co.**
**Cleveland, Ohio**

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—so why take chances on radiators that have not been tested and proven perfect?

**LOGAN**

**High Pressure Tested**

**Radiators**

are thoroughly tested with 120 lbs. hydraulic pressure before shipment and positively **will not leak.**

Neat, ornamental, durable.

All patterns steam and water.

Highest quality radiation at a reasonable price.

Ask your jobber for prices.

**Logansport Radiator Equipment Co.**
**Logansport, Indiana**



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**FOR RESIDENCE SERVICE**

Automatic Electric Controller. (Underwriters' Approval)
Welded Galvanized Tank
Pressure Gauge
Long Water Gauge
Special Moisture Proof Motor
Pump, Motor, Tank, Automatic Electric Controller and All Fittings Assembled Complete As Shown and Mounted On One Solid Cast Iron Base
Silent and Efficient Drive Consisting Flat Belt to Pulleys and Slow Speed Gears
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Positive Air Charging and Priming Device (Patented)
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| Seattle, Wash. | Armour Bldg. |


### Los Angeles.

The Sanitary Plumbing Co., 1521 West Seventh Street, are doing the plumbing and heating on the new Barbara Worth Hotel at El Centro, Cal. This contract amounts to $16,000. They are also doing the plumbing on the Santa Rosa Hotel, which is being remodeled.

Swinnerton Bros., 209 North Broadway, report business good and among a lot of jobbing work have the contract for the plumbing work in remodeling the Hickson Apartments, which amounts to $1,250.

A. Hess has moved his office to the new Baker Detweiler Building on Sixth Street, which is just completed. Arthur is some busy man nowadays. He has the contract for the new Southern Pacific R. R. station in Los Angeles, and the new Santa Fe station in San Diego. He is also just starting the Methodist Hospital job for which he has both the plumbing and heating contracts. This is a very fair job and the contract amounts to $32,000. Another fine job which is helping keep him busy is the new Corporation Building, which is a 190 fixture contract.

Thos. Haverty Co., are busy with the heating and ventilating work on the Citizens National Bank Building which is a contract amounting to $31,000. They also have the plumbing and heating contracts for the new Van Nuys school, which is a $10,000 job.

Frank A. Stevens Co., 258 South Los Angeles Street, "live wire" heating, power and vacuum supply house, have opened up a branch house at San Francisco at 1105 Mission Street, with L. T. Halloran in charge.

W. H. Redfern reports business a little quiet with him, but says he has the contracts for four bungalows and a flat building.

Crowell & Sutton, 744 San Pedro Street, are just finishing the Bible Institute Building on which they did the plumbing, heating, vacuum and automatic sprinkler work. This is a 1,120 fixture job and the contract ran close to $100,000. They are just starting work on two new schools, one in Glendora and one in Montebelo.

R. Ward, formerly of 991 El Molino Street, has moved into his own building at 3168 West 10th Street, and is busy fixing up a show room in which he will show a modern line of goods.

Howe Bros., 1198 San Pedro Street, have just finished the Trinity Auditorium. This is one of the largest jobs of plumbing done here in some time, 751 fixtures being used. They are also doing the plumbing on the city public comfort station at 9th and Main Streets. This contract includes 16 waterclosets and the complete job runs to $2,000. Mr. J. C. Netz, their hustling manager, says that the Citizens' National Bank Building job, for which they have the contract, will be a record-breaker for time. They will install 787 fixtures in this building and are working night and day to complete it on time. This contract amounts to $31,000.

### Other Cities in the State.

Plans are now being drawn for extensive alterations to the Hotel Ahrens in Oakland. New plumbing, electrical work and other improvements will be made at a cost of about $9,000.

The store and shop of W. H. Miller, of Oakland, was destroyed by fire a few days ago.

The Board of Education of Richmond, is advertising for bids for the materials, construction and installation of a lavatory building and system in the Lincoln school.

Bids will soon be asked for the plumbing and heating of the proposed new Sacramento County Hospital at Sac-

ramento. It is estimated the building will cost about $500,000.

Work has been started on a large amount of additional sewer work in Grass Valley. Plans are under way for additions to the water distributing system.

W. D. Winfield, formerly of Winfield, Kansas, has purchased the plumbing and hardware business of Loney & McLaughlin, of Vacaville.

# Washington

### Seattle and Vicinity.

Seattle's record for the first eight months of 1914 is without a parallel on the Pacific Coast, with the exception of San Francisco, and is indicative of a rapid and substantial growth. The permits issued from January to September totalled $9,969,970, as compared with $7,230,640 in the corresponding eight months of 1913.

Plumbing and heating contractors in the city proper and throughout the suburban districts, report excellent business for the past month. Prices, however, are low and competition is close. The smaller shops are getting their share of the residence work, while practically all of the business blocks are taken care of by the larger downtown shops.

A few of the large contracts which have been secured recently by Seattle heating and plumbing contractors are: The Eckart Plumbing & Heating Co., 1614 Third Avenue, was awarded one of the largest plumbing contracts awarded this year, amounting to $8,000. This is for plumbing to be installed in the Stuart Building at the corner of Fourth Avenue and University Street. The heating contract was awarded W. D. Allen, heating and ventilating contractor, Green Building, at an approximate expenditure of $8,000. D. H. King, 214 Columbia Street, has the plumbing contract in a building at 323 25th Avenue, for C. W. Hecht and in a building at 1162 E. Newton Street for C. H. Bickel; also plumbing and heating in R. A. Stuart's building at 3105 Cascadia Avenue. Among the contracts secured by The Ernst Hardware & Plumbing Co., 514 Pike Street, are: Plumbing, at 1207 Fifth Avenue, 1409 Twenty-fifth Avenue, 2619 Aloha Street, 2562 Seventh Avenue, West, and at 1906 Ninth Avenue, West. This company has also contracted to install heating at 4546 Orcas Street, 225 Tenth Avenue, N. E., 4040 Thirty-ninth Avenue, S. E., and 4524 Forty-fifth Avenue, S. W.

The contract for installing plumbing fixtures in the school house on the corner of 18th Avenue and East Union Street has been awarded to the Navarre Co., Railway Exchange Building.

The Rautman Plumbing & Heating Co., 617 4th Avenue, will install the heating in a modern office building and warehouse for August Melhorn.

### Other Cities in the State.

D. F. Doherty, of Vancouver, has secured the contract to install a pumping system in the local cemetery for $1,020.80.

The R. E. Connell Plumbing Co., of Hoquiam, has secured the contract to supply the water department of Aberdeen with 5,000 feet of pipe.

An ordinance has been passed in Tacoma, directing the installation of additions to the municipal waterworks at an estimated cost of about $5,000.

A. Gheri & Co., heating contractors, Tacoma, Wash., on a bid of $14,845 and $14,772, were low for the installation


**Water Heater Perfection**

There is nothing left to chance in the Latest Improved

**Hoffman Instantaneous Water Heater**

It is equipped with our NEW Thermostat—the simplest, most positive and effective thermostat ever devised.

Reverses action of Water Valve instead of acting on gas valve—a radical improvement in thermostat construction.

Good profits in handling the HOFFMAN line of heaters.

Write for particulars and prices.

Costs less and does more.

**The Hoffman Heater Co.**

**Lorain, Ohio**

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**Ball-Bearing Packless Radiator Valve**

Constructed entirely on high grade principles. Its superiority over other so-called packless valves makes it largely in demand for the better class contracts.

Sold on its own merits and under our **positive guarantee.**

One trial of this valve will make you our customer for life.

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**The Dole Valve Co.**

**206 N. Fifth Avenue**

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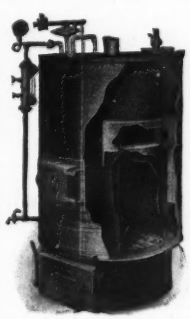

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**Dunning Steel Boilers**

30,000 in use; over 1,000 in U. S. Army Posts. Cannot crack; will burn any fuel. Our Catalog No. 55 shows Pneumatic Tanks. Ask for it too.

**New York Central Iron Works Co.**

**Box 68, Hagerstown, Md.**

# Please the Housewife

and you please the purchasing agent of the house. Tell her the merits of

## Sani-Flush

It is NOT a common scrubbing powder, but a special preparation that reaches every part of a closet bowl, and keeps it perfectly sanitary and odorless.

Requires no scrubbing or brushing. Simply shake a little SANI-FLUSH into the bowl and it forms a solution in the water that loosens all deposit by chemical action.

**Will not injure bowl or pipes.**

You can make easy profits handling SANI-FLUSH. Nationally advertised.

Write for free trial can and full particulars today.

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The Ideal Closet Connection. In all sizes. Sanitary and substantial.

Approved by the Building Departments of Philadelphia, Boston, Buffalo, Brooklyn and other principal cities.

**Flange and Connections Patented**

Iron or Brass Calking, Flanges, Brass Bolts. Nickel Plated Nuts and Washers furnished with each connection.

This Fitting takes the place of Lead Bend. Brass Floor Plate, Brass Ferrule, 4" Solder Joint and Fittings in Wall.

Saves you money on Material and Labor.

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Philadelphia Representative,
John L. Fritz,
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Philadelphia, Pa.


of a heating system in the new high school under construction in Eugene. The Pacific Heating & Engineering Co., Portland, secured the vacuum cleaning system for $850.

Appling & Griggs, plumbing and heating contractors of Tacoma, have been awarded the contract for installing the heating system in the high school being constructed at Molson.

# Oregon

### Portland.

F. A. Naramore, school architect, Portland, reports that A. C. Meyers, 1084 Albany Avenue, on a bid of $15,737 was low for the construction of the Fulton Park school. This building will be of hollow tile and concrete. The low bid, $1,547, for plumbing installations was submitted by Fullman & Walker, 425 Jefferson Street, Portland. The Alaska Plumbing Co. was awarded the contract for the installation of a heating and ventilating system, consideration $3,024. The competition on this job was exceptionally keen.

Palmer & Ellison, general contractors, Henry Bldg., Portland, will build the Elks' Temple in LaGrande, they having been recently awarded the general contract for construction. The subcontracts, including plumbing, heating, electric wiring, etc., have not yet been let, and plumbing and heating contractors from all over the state have been requested to submit tenders.

W. W. Cox, plumbing and heating contractor, 63 North Park Street, Portland, will install the heating and ventilation in the high school under construction in Rainier. Their bid for the work was $4,800.

H. H. Leonard, plumbing and heating contractor, Henry Bldg., Portland, on a bid of $1,200, has been awarded the contract for installing plumbing fixtures in an apartment house at W. 1220 Sixth Avenue, for A. F. Johnson. Mr. Leonard carried on an active business during the past summer.

W. W. Cox, plumbing and heating contractor, 63 North Park Street, Portland, has been awarded the contract for installing a heating system in the Laurelhurst Club, to be built by A. W. Kutsche, contractor, Yeon Bldg. The award for plumbing has not yet been made.

Claussen & Claussen, architects, Macleay Bldg., Portland, will receive bids shortly for the general and subcontracts on a Chinese Mission which is being financed by Fisher Brothers. The structure will be two stories in height, of brick construction, costing approximately $25,000.

The Building Committee of St. Mary's Cathedral parish, Portland, has approved of the plans drawn by architects, Whitehouse & Fouilhoux, and Jacoberger & Smith, Board of Trade Building, for the proposed parish school and archbishop's residence to be built on the church's property. Bids for the general and subcontracts will be received in the immediate future. The school building alone will cost about $50,000.

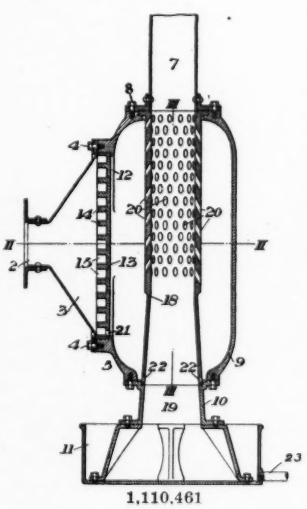
Plans for a concrete business block to be erected in Bandon by Dr. Biggs and Gus Buckingham, and figures for the general and subcontracts, will be received by the architect, Benjamin Ostlind, of Marshfield, shortly. The heating and ventilation systems will be installed on an elaborate scale. The plumbing contract will be let separately.

# Patents

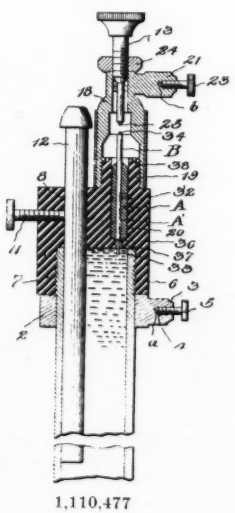
### Heating Department.

1,110,461. Exhaust-Condenser for Steam-Exhaust Pipes. Joseph M. Searle, Pittsburgh, Pa. A vertically disposed steam exhaust pipe having a condenser at its lower end said pipe extending a suitable distance above the condenser and communicating with said condenser at its lower end for admitting steam from the condenser to the pipe, said condenser having an inlet opening for the steam, the condenser also having an opening to the atmosphere at its lower end for admitting air at atmospheric temperature to the condenser and pipe to reduce the temperature of the steam and cause condensation of the steam before it reaches the top of the pipe; substantially as described.

1,110,477. Thermostat. Julius Boekel, Philadelphia, Pa. A circuit-closing float for a thermostat consisting of a body of non-oxidizable material having a longitudinal central bore and a metallic rod fitted into said bore and provided with contacts on its ends extending beyond said body, in combination with a fixed part having a bore fitting said body, in which bore said float moves up and down, a mercury receptacle below said bore which communicates with the latter by means of a hole of less diameter than said bore, and devices adapted to make circuit through said contacts and rod, the lower contact of said float being of sufficient length to extend down through said hole into said receptacle and of sufficiently small diameter to penetrate below the surface of the mercury.

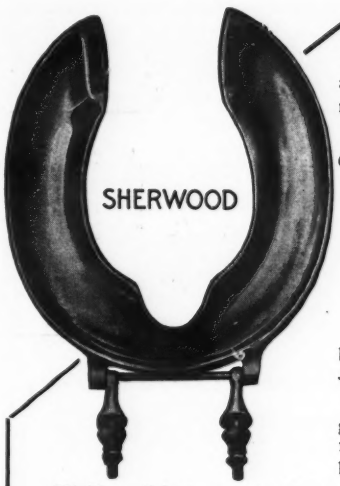


1,110,461



1,110,477

1,111,185. Bench-Vise. Henry H. Schmidt, Bessie, Okla. On a vise having a frame with a fixed jaw, and a movable jaw, upper and lower draw-bars carried by the movable jaw and having notches in their lower edges, a plate carried by the fixed jaw having an opening therethrough for the reception of said lower draw-bar and with which said notches are adapted to engage whereby to adjust the draw-bar, a lever pivoted on said frame having one end engaging the notches of the upper draw-bar, a yoke carried by the lever receiving the inner end of the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Will not harbor germs like the ordinary wood or composition seat.

Highly polished—may be cleaned with soap and water without injury.

Made to last a lifetime.

We want you to have a sample "Sherwood" seat in your display room and will send you one (one only) by parcel post at one-half regular price.

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**PERKES FORCE PUMP**

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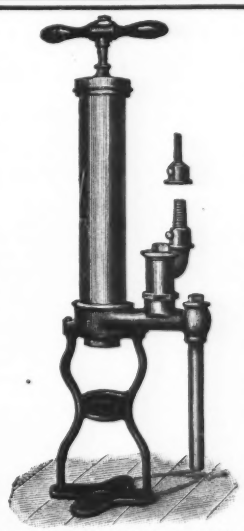

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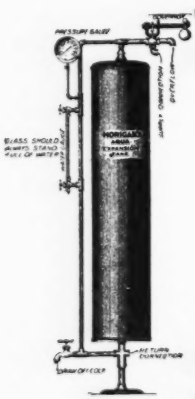

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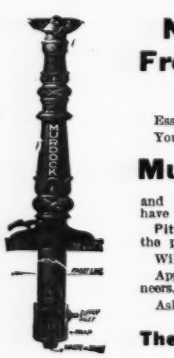

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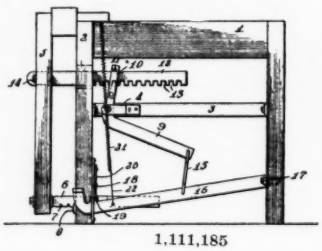
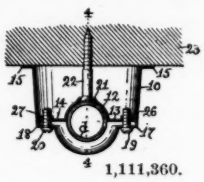
**Cincinnati, Ohio**


upper draw-bar, and means for reciprocating said lever whereby to move said upper draw-bar to open and close the vise.

1,111,360. Two-piece pipe hanger. Lewis A. Carpenter and Richard Middleton, Revere, Mass. A pipe hanger comprising a sheet metal base member having a hollow body portion open at its rear end and provided with an outwardly extended flange, said body portion having side and end walls tapering from the rear of said body portion toward its front end and provided with a front wall separated from the rear end of said body portion and having a recess for the reception of a pipe and substantially flat portions on opposite sides of said recess, and a cap member having a recess for the reception of the pipe and the ears on opposite sides thereof, and means to secure said ears to the flat portions of the front wall of said base member.



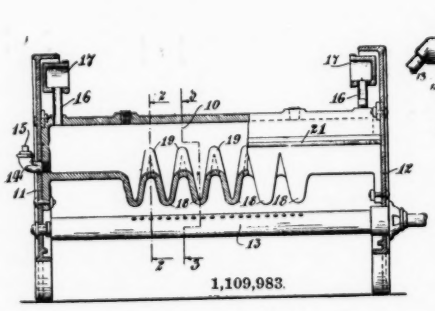
1,111,185



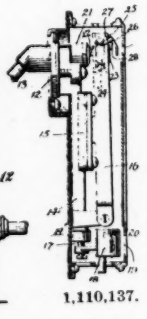
1,111,360.

1,109,983. Boiler for Steam-Radiators. William H. Geiseler, Passaic, N. J. A heater for a steam radiator comprising a burner, a boiler mounted above the same having the bottom wall thereof formed into a plurality of pockets and longitudinal flanges extending outward from the longitudinal walls of the boiler.

1,110,137. Thermostatic Control Device. Carl F. Johnson, Milwaukee, Wis., assignor to Johnson Service Company, Milwaukee, Wis., a corporation of Wisconsin. The combination with a motor actuated control device including a responsive element, a motor controlled thereby, a pilot valve, and a quick throw device forming an operative connection between said motor and valve, of an indicator adapted to be actuated by the operation of said quick throw device to indicate the position of the pilot valve.



1,109,983.



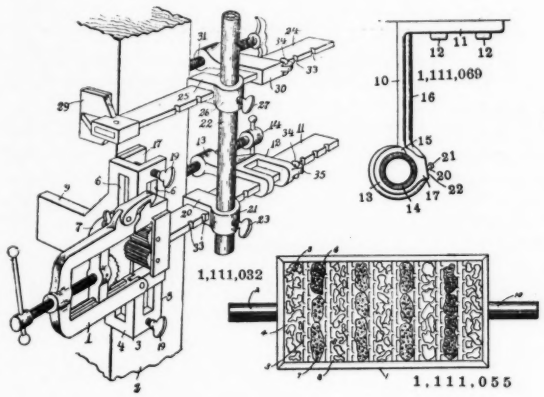
1,110,137.

1,111,032. Pipe-Vise Support. William Alfred Pike, Medford, Mass. A pipe-vise support comprising an upright having an arm, a bar rigidly extended from the upright at right angles to said arm, a sleeve adjustable along said bar, and a clamping screw carried by said sleeve to oppose said arm, said upright having means for the ready attachment of a pipe vise thereto.

1,111,069. Pipe Hanger. Louis A. Hoerr, St. Louis, Mo. In a pipe hanger, the combination with a member embracing the pipe, said hanger having an opening extending

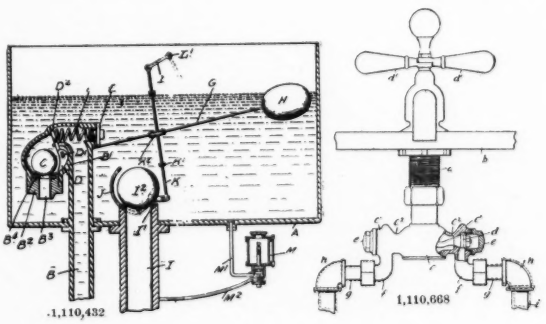
laterally through it, and a wedging member adapted to be driven through said opening between said pipe and hanger to lock said parts together.

1,111,055. Process of Regenerating Air. Hector R. Carveth, Niagara Falls, N. Y., assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y., a Corporation of New York. The process of regenerating air consisting in passing the exhaled air in a closed circuit first over a regenerating agent, then over a hydrating agent and then over a regenerating agent.




### Plumbing Department.

1,110,432. Flushing-Tank. William Alexander Fraser, Georgetown, Ontario, Canada. In a flushing tank, the combination with the flushing pipe and inlet pipe, the inlet pipe having an elbow at the top forming a valve chamber and an outlet orifice, a ball and seat therefor at the bottom of the valve chamber, of a shifting lever pivoted on a suitable fulcrum pin and an arm connected to said pin and having a float thereon, said shifting lever and valve being interposed between the pressure or intake end of said inlet pipe and said seat, a passage leading from the upper end of said chamber, an adjustable plug in said passage, and a spiral spring disposed between the upper end of said lever and said plug.




1,110,668. Lavatory-Fitting. William Bunting, Jr., Brookline, Mass. A lavatory fitting comprising a discharge casing adapted to be rigidly mounted in the lavatory and having an inlet casing rigidly connected thereto, said inlet casing having a valve chamber and an inlet elbow connected to the under side of said chamber, said elbow extending downwardly and laterally therefrom and being constructed to yield vertically with relation to said casing, and a supply-pipe connection for the end of said elbow, substantially as described.

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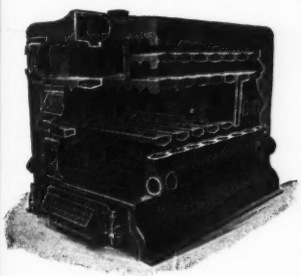

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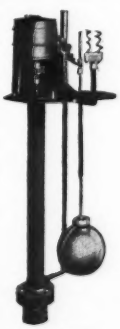

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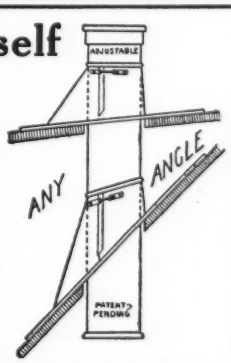

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Write for Catalog explaining other advantages of the Patterson Tank.
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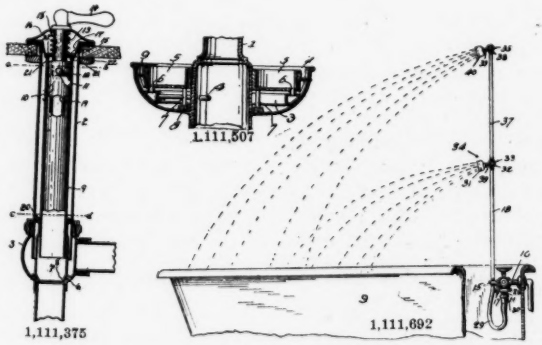
1,111,375. Bath and Basin Waste. Henry F. Goetz, Waterbury, Conn., assignor to Waterbury Mfg. Co., Waterbury, Conn., a Corporation. A bath or basin waste comprising a tube, a casing coupled with the lower end of said tube, said casing formed with a valve seat, a tubular valve the lower end of which co-acts with said seat, a tubular valve stem with which the tubular valve is connected, said valve stem formed on opposite sides with cam slots, a bonnet connected with the upper end of the tube and adapted to support said tube, a flange also supported by the bonnet and adapted to guide the upper end of said valve stem, a rotatable spindle extending through said bonnet, a pin carried by the lower end of said spindle and engaging with said cam slots, and means for turning said spindle.

1,111,507. Horse Drinking Fountain. Fred A. Thomas, Pawtucket, R. I. A device for converting a single basin drinking fountain into one having individual drinking cups, including a perforated plate formed separate from the basin, means to support the plate below the upper edge of the basin of a fountain, a series of independent cups secured to the plate and having their upper edges located above the plate, and common means to supply water to the cups.




1,111,692. Shower Bath. Alexander S. Harvey and Joseph W. Brill, Los Angeles, Cal., assignors to William R. Wallace, Los Angeles, Cal. A detachable shower bath comprising an upper and a lower tube, means to vertically adjust and secure the lower end of said lower tube to a bath cock, a flexible connection from said cock to said lower tube adapted to convey fluid thereto, a hollow connection secured to the upper end of said tube and the lower end of said upper tube having a channel adapted to convey fluid through said connection and to a spraying member supported in relation thereto, an elongated spraying member vertically adjustable in said connection, a valve casing secured to said upper end of said upper tube and adapted to convey fluid to a spraying member, and an elongated spraying member vertically movable in relation to said valve casing, whereby the supply of fluid thereto may be cut off as desired.

## FINANCIAL TROUBLES.

A petition in bankruptcy has been filed by Paul C. Butterfield, a master plumber of Glendale, Cal. Liabilities $4,029.06; assets, $4,893.98.

Everett W. Jones, a master plumber of Portland, Me., has filed a petition in bankruptcy. He owes $7,636 and has assets listed at $1,775.

A petition in bankruptcy has been filed in the federal court by Fred Fox, the well-known contracting plumber of Chattanooga, Tenn. Liabilities are shown at approximately $10,000 with assets at practically the same amount.